

# Service Manual

## Color Television

**CHASSIS : CN-012N**

**Model : DTQ-29M2FS**



**DTQ-29M2FS**

## ■ Specification

Items	Model	DTQ-29M2FS
TV Standard	NTSC-M	
Power Input	120/220V, 50/60Hz	
Power Consumption	130W	
Tuning System	Frequency Synthesizer(FS)Tuning System	
Tuning Ranges	TV VHF(L) : CH2 - CH6 UHF(H) : CH7-CH13 UHF : CH14-CH69 CATV VHF(L) : 5A, A,B, A-5A-1 CH2 - CH6 VHF(H) : C-W+11 CH7 - CH13 UHF : W+12-W+84	
Sound Output	7W+7W	
Speaker	8 ohm 12W×2EA	
Antenna Input Impedance	75 ohm Unbalanced	
Auxiliary Input Terminal	Font: Video, Audio(R,L) Rear: Video, Audio(R,L)	
Auxiliary Output Terminal	Rear: Video, Audio(R,L)	
Intermediate Frequencies	Picture IF Carrier Frequency : 45.75MHz Sound IF Carrier Frequency : 41.25MHz Color Sub-Carrier Frequency : 3.579545MHz	
Remote Control	R-43A05	
Special Function	1) Icon Type 2) 4-Language OSD 3) With CAPTION 4) CH Label 5) Digital Sensor 6) Surround 7) AVC 8) Wide Picture(Option)	

DAEWOO ELECTRONICS CO., LTD

<http://syc.dwe.co.kr>

Feb. 2001

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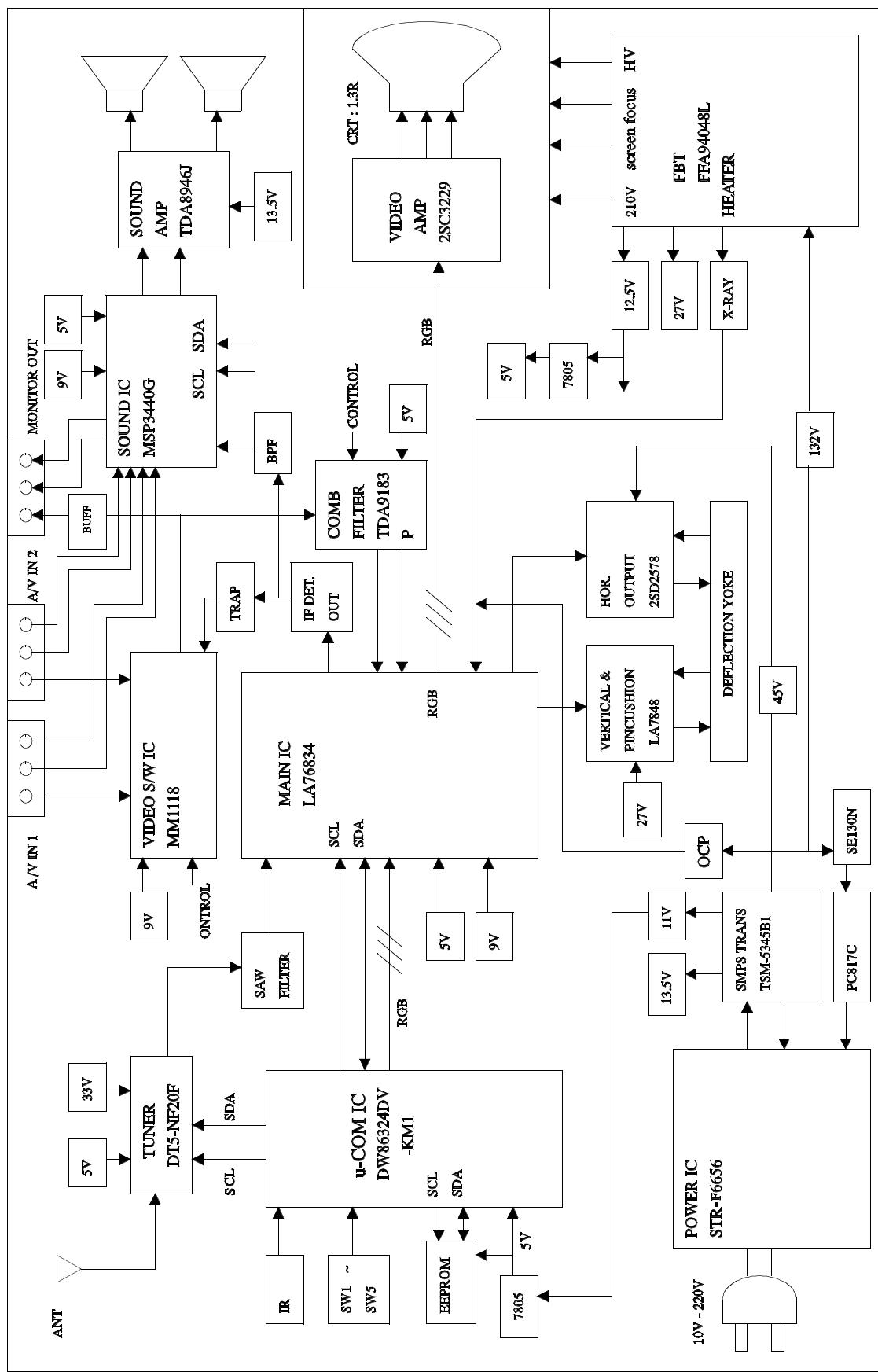
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# SPECIFICATIONS

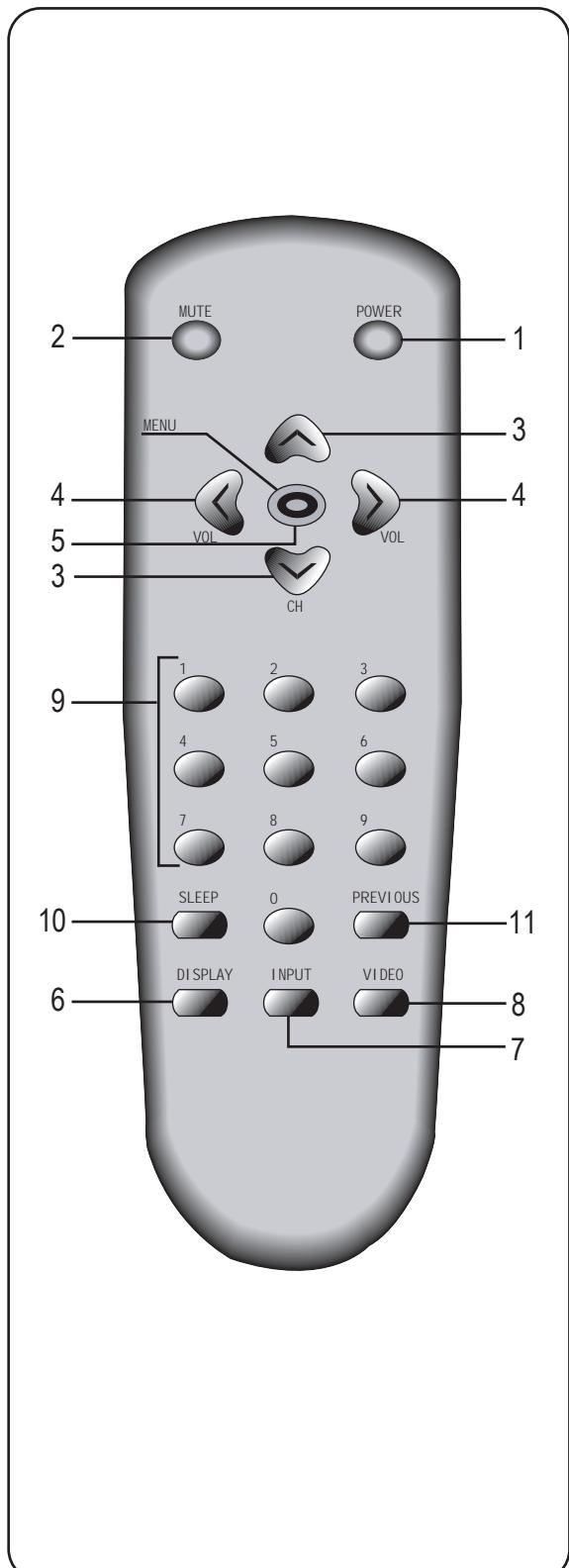
ITEMS \ MODEL	DTQ-29M2FS	REMARKS
TV STANDARD	NTSC-M	
POWER INPUT	120/220V , 50/60Hz	
POWER CONSUMPTION	130W	
TUNING SYSTEM	Frequency Synthesizer ( FS ) Tuning System	
TUNING RANGES	<p>TV            VHF(L) : CH2 ~ CH6                         UHF(H) : CH7 ~ CH13                         UHF : CH14 ~CH69                         CATV    VHF(L) : 5A, A,B, A-5 -A-1                             CH2 ~ CH6                         VHF(H) : C-W +11                             CH7 - CH13                         UHF : W +12- W+84</p>	
SOUND OUTPUT	7 W+ 7 W	
SPEAKER	8 ohm 12W * 2EA	
ANTENNA INPUT IMPEDANCE	75 ohm Unbalanced	
AUXILIARY INPUT TERMINAL	FRONT : VIDEO, AUDIO(R,L) REAR : VIDEO , AUDIO(R,L)	
AUXILIARY OUTPUT TERMINAL	REAR : VIDEO, AUDIO(R,L)	
INTERMEDIATE FREQUENCIES	Picture IF Carrier Frequency : 45.75 MHz Sound IF Carrier Frequency : 41.25 MHz Color Sub-Carrier Frequency : 3.579545 MHz	
REMOTE CONTROL	R-43A05	
SPECIAL FUNCTIONS	1) ICON MENU TYPE                    5) DIGITAL SENSOR 2) 4-LANGUAGE OSD                    6)SURROUND 3) WITH CAPTION                      7) AVC 4) CH LABLE                            8)WIDE PICTURE(OPTION)	

# CIRCUIT BLOCK DIAGRAM



# ALIGNMENT INSTRUCTION

## Your Remote Control(R-43A05)



### 1. POWER

use this button to turn your TV on or off.

### 2. MUTE

Use to turn the TV's sound on and off.

### 3. ▼CH▲

Use these buttons to change your TV's volume, to activate selections in the menu system.

### 4. ◀VOL▶

Use these buttons to change your TV's volume, to activate selections in the menu system, or to change audio and video settings.

### 5. MENU

Use this button to turn the TV's menu system on and off.

### 6. DISPLAY

Use this button to display the channel number and status.

### 7. INPUT

Use this button to select the TV's signal source.

### 8. VIDEO

Use this button to display video adjustment.

### 9. 0-9

Use these buttons to change channels.

### 10. SLEEP

Use this button to program the TV to turn off after a certain time.

### 11. PREVIOUS

Use this button to return to the previous channel you were watching.

## 1. SERVICE MODE ADJUSTMENTS

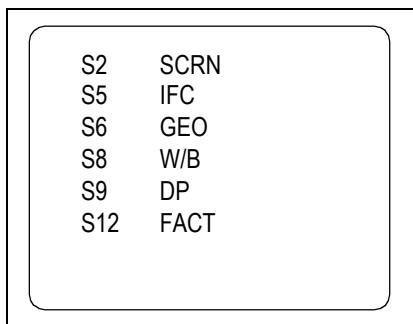
Follow the steps below whenever service adjustment is required. See Table- A and Table- B to determine if service adjustments are required.

### 1) How to enter the service mode using the user remote control.

- Turn the set on.
- Direct the remote control to the reception window of TV.
- Push buttons of remote control in sequence as follows.

**1 ® MUTE ® DISPLAY ® MUTE**

- Then, the screen will appear as follows.



- Using the channel up or channel down button, select the item you wish to adjust.  
(The color of selected item turns into the red.)
- Press the volume up or down button to enter in the service mode you wish to adjust.

### 2) How to memorize the adjusted values in the service mode.

- Must press **DISPLAY** button the state which the screen is displaying each of service menus after all adjustments are completed each of all service menu.

Table-A : Adjust the values of service mode when a part is replaced.

PART REPLACED	ADJUSTMENT		NOTES
	NECESSARY	UNNECESSARY	
I701 (U-COM)		O	Data is stored in I703.
I101 (MAIN)		O	
I702 (EEPROM)	O		Initial setting values are written from I701. ADJUSTING ITEMS  S5 : RFAGCD S6 : H.PHASE/V.POSI/V.SIZE S8 : RD/GD/BD/RB/GB/BB S9 Subbrightness
CRT	O		Adjust items related to picture tube only.(White Balance adjustment)

## ALIGNMENT INSTRUCTIONS

Table-B

MODE	ADJUSTMENT	DATA		REMARKS
		INITIAL	RANGE	
S2	Screen Adjustment			
S5	IF CONTROL			
	RF AGC DELAY *	20	0 ~63	Align RF AGC threshold
	AGC POINT	3.75	3.25~4.0	Select AGC reference voltage
	A/D VALUE	-	-	
	FM/MAM PRESCALE	18	0~255	Must be set to 18
	SCART PRESCALE	18	0~255	Must be set to 18
	MONITOR VOLUME	119	0~255	Must be set to 119
S6(4:3)	H-CENTER *	11	0~31	Align sync to flyback pulse,using internal cross pattern(s11)
	V-CENTER *	22	0~63	Align vertical DC bias,using internal cross pattern(s11)
	V-LIN *	12	0~31	Must be set to 12
	H-SIZE *	32	0~63	Align sync to flyback pulse,using internal cross pattern(s11)
	V-SIZE *	96	0~127	Align vertical amplitude,using internal cross pattern(s11)
	V-S	12	0~31	Must be set to 12
	V-SIZE-C	7	0~7	Must be set to 7
	P-CUSHION *	30	0~63	Align pincusion,using internal cross pattern(s11)
	TIILT *	37	0~63	Align tilt,using internal cross pattern(s11)
	TOP-C	8	0~15	Must be set to 8
S6-2(16:9)	BOT-C	8	0~15	Must be set to 8
	WVPOS *	22	0~63	Align vertical DC bias,using internal cross pattern(s11)
	W-V-SIZE *	48	0~127	Align vertical amplitude,using internal cross pattern(s11)
	W-V-LIN *	12	0~31	Must be set to 12
	W-V-S	12	0~31	Must be set to 12
	W-P-CUSHIO *	17	0~63	Align pincusion,using internal cross pattern(s11)
	W-TILT *	37	0~63	Align tilt,using internal cross pattern(s11)
S8	W-TOP-C	8	0~15	Must be set to 8
	W-TOP-C	8	0~15	Must be set to 8
	R-DRIVE *	63	0~127	Align red out AC level
	G-DRIVE *	15	0~15	Must be set to 15
	B-DRIVE *	63	0~127	Align blue out AC level
	R-BIAS *	127	0~255	Align red out DC level
S9	G-BIAS *	127	0~255	Must be set to 127
	B-BIAS *	127	0~255	Align blue out DC level
	SUB-BRIGHT *	75	0~127	Align common RGB DC level
	DP-CONTRAST	27	0~27	
	DP-SHARPNESS	5	0~30	
	DP-COLOR	27	0~27	
	DP-TINT	38	0~77	
S11	VIDEO LEVEL	7	0~7	
	FM LEVEL	30	0~31	
	internal black	-	-	Display internal black pattern
	internal 100% white	-	-	Display internal 100% white
S12	internal 60% white	-	-	Display internal 60% white
	internal cross pattern	-	-	Display internal cross pattern
	Forwarding Mode	-	-	Factory initialization

\* indicates the items with different settings each of sets

## 2. ASSEMBLY ADJUSTMENTS

### 1) SCREEN ADJUSTMENT (S2)

- Enter the service mode and select service adjustment S2.
- You can see the one horizontal line on the screen.
- Adjust the Screen Control Volume (located on FBT) so that the horizontal line onscreen may be disappeared.
- Press the volume up or down button to exit in the screen adjustment mode.

### CAUTION

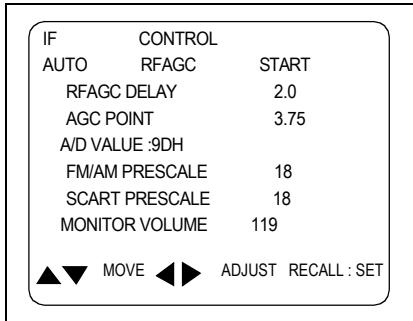
IN THE SCREEN ADJUSTMENT MODE, DONT PRESS OTHER BUTTONS EXCEPT VOLUME UP OR DOWN BUTTON.

**2) FOCUS ADJUSTMENT**

- Turn in a local station and adjust the Focus Control knob (located on FBT) for best picture details at high light condition.

**3) RF AGC DELAY ADJUSTMENT (S5)**

- Receive a good local channel.
- Enter the service mode and select service adjustment S5.
- You can see the OSD as shown in below.



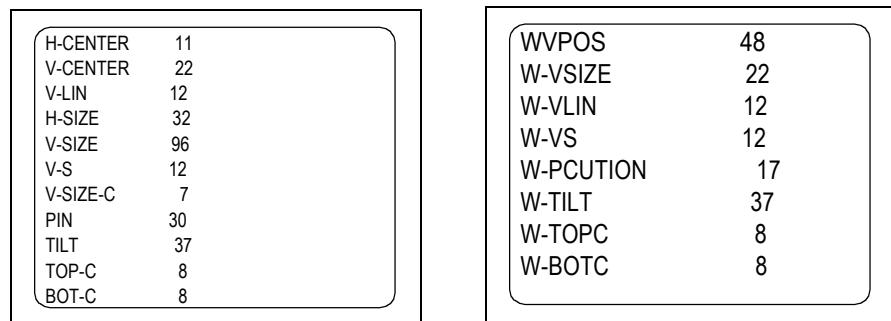
- Select RFAGC item, press the volume up or down button until noise or beat in picture disappears.
- Press the DISPLAY button to memorize the data.

**4) GEOMETRIC ADJUSTMENTS (S6)**

- Enter the service mode and select service adjustment S11.
- Whenever you select the "S11" using the volume up or down button, the screen is changing like this.



- Using the volume up or down button, select internal cross pattern.
- Select service adjustment S6
- You can see the OSD as shown in below.

**4-1. Horizontal Position Adjustment**

- Select H-CENTER item, adjust H-CENTER data value to obtain proper horizontal centering of the internal cross pattern at the left and right of the screen.

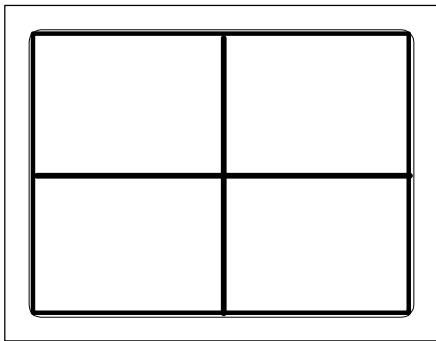
**4-2. Vertical Position Adjustment**

- Select V-CENTER item, adjust V-CENTER data value to center the raster properly on the screen.

## ALIGNMENT INSTRUCTIONS

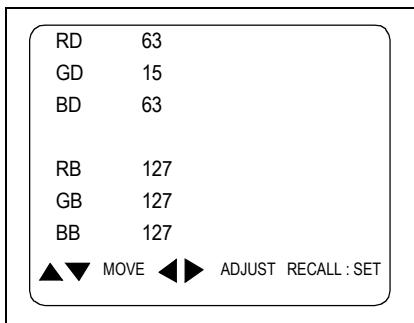
### 4-3. Vertical Size Adjustment

- Select "V.SIZE" item, adjust "V.SIZE" data value to proper vertical size as follows.



### 5) WHITE BALANCE ADJUSTMENT(S8)

- Receive a good local channel.
- Enter the service mode and select service adjustment S8.
- You can see the OSD as shown in below.

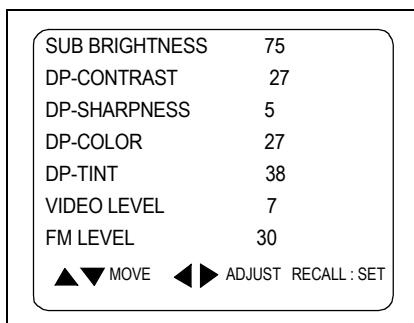


- Using volume up or volume down, adjust service adjustment data of RD/GD/BD and RB/GB/BB until a good gray scale with normal whites is obtained.
- Press the DISPLAY button to memorize the data.

### 6) DIGITAL PRESET(D.P) ADJUSTMENTS(S9)

#### SUBBRIGHTNESS ADJUSTMENT

- Receive a good local channel.
- Enter the service mode and select service adjustment S9.
- You can see the OSD as shown in below.



- Select Subbrightness item, adjust Subbrightness data value to obtain normal brightness level.
- Press the DISPLAY button to memorize the data.

**CONTRAST**

- Fixed value = 27

**TINT**

- Fixed value = 38

**COLOR**

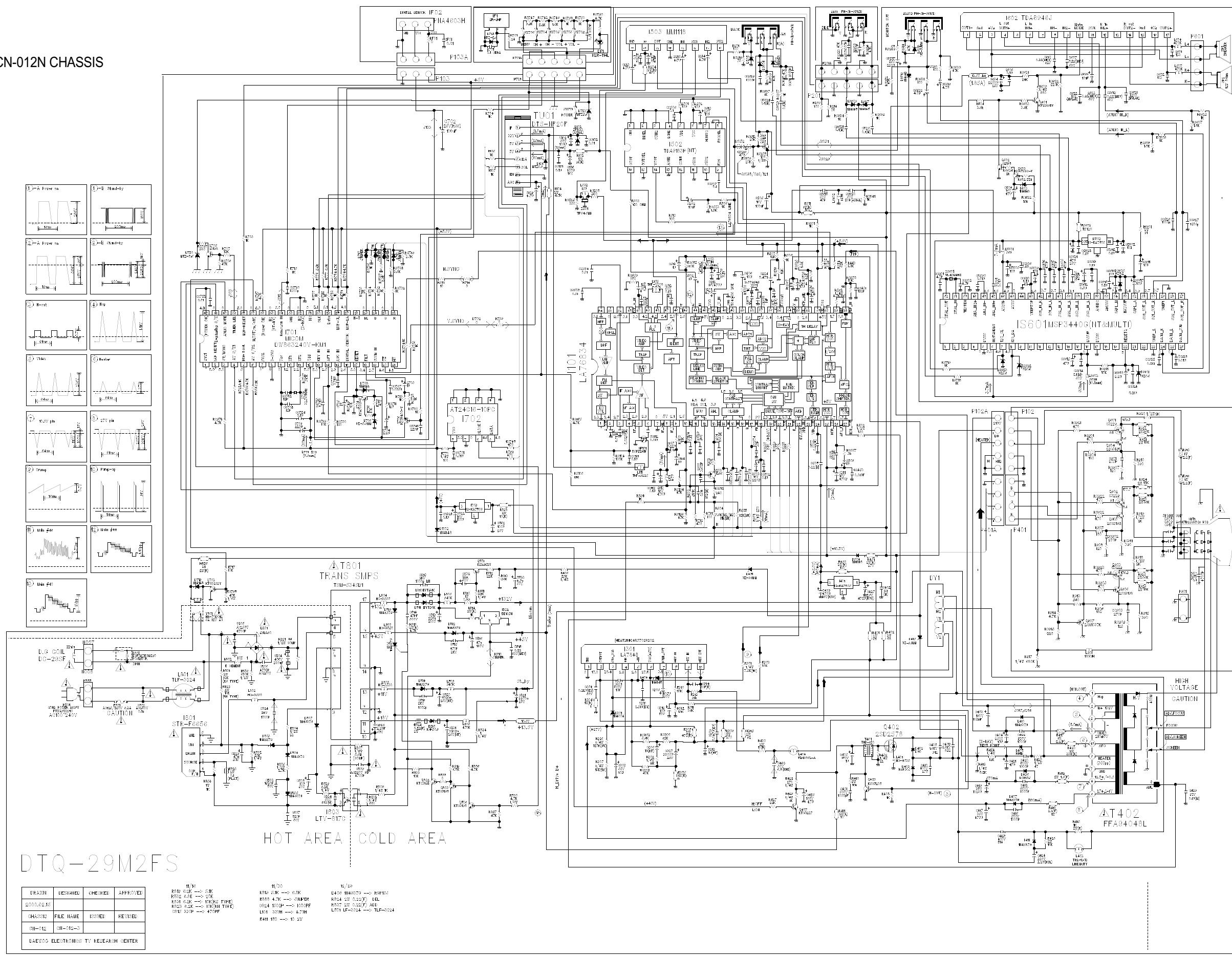
- Fixed value = 27

**7) FACTORY OUTGOING MODE (S12 : FACT)**

- If you select the S12, then the set becomes factory outgoing status.
- You can see the OSD “outgoing OK”

# SCHEMATIC DIAGRAM

## CN-012N CHASSIS



# ELECTRICAL PARTS LIST

## CAUTION

“” is a safety part, so it must be used the same part.

“” is a recommendable part for essential stock.

LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK	LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK
ZZ100	48B4343A05	TRANSMITTER REMOCON	R-43A05 (AA)		M201	4852075201	MASK FRONT	HIPS GY	
ZZ110	PTACPWJ829	ACCESSORY AS	DTQ-29M2FS		M251A	4852541301	GRILL R	PS T0.45	
30	4850Q00810	BATTERY	R6P/LN		M251B	4852541401	GRILL L	PS T0.45	
M821	4858213800	BAG INSTRUCTION	L.D.P.E T0.05X250X400		ZZ202	PTSPPWJ829	SPEAKER AS	DTQ-29M2FS	
ZZ120	PTBCSHJ811	COVER BACK AS	DTQ-29M2		P601A	4850704S31	CONNECTOR	YH025-04+35098+ULW=800	
M211	4852157101	COVER BACK	HIPS BK		SP01	4858311110	SPEAKER	12W 8 OHM SP-58126F	
M781	4857817630	CLOTH BLACK	FELT 400X20X0.7		SP02	4858311110	SPEAKER	12W 8 OHM SP-58126F	
M782	4857817612	CLOTH BLACK	FELT 250X20X0.7		ZZ204	PTJASWJ811	PCB JACK AS	DTQ-29M2	
ZZ130	PTPKCPJ811	PACKING AS	DTQ-29M2		JA02	4859105450	JACK PIN BOARD	YSC03P-4120-9S	
M641	6520010100	STAPLE PIN	18M/M J D O		M112	4851114001	PANEL AV ASSY	2326801+5934300	
M681	4856812400	BAND	18MM X 3M		M112A	7178301011	SCREW TAPPTITE	TT2 WAS 3X10 MFZN	
M801	4858057600	BOX CARTON	DW-3		M684	4856812001	TIE CABLE	NYLON66 DA100	
M811	4858194600	PAD A	EPS		P201A	4850705S04	CONNECTOR	YH025-05+YST025+ULW=400	
M821	4858215600	BAG P.E	PE FOAM t0.5x1600x1270		ZZ200	PTJAJAJ811	PCB JACK AXIAL AS	DTQ-29M2	
ZZ131	58G0000149	COIL DEGAUSSING	DC-29SF		A001	4859802917	PCB JACK	79.05X27.3(197X246/14)S1B	
ZZ132	48519A4210	CRT GROUND NET	2901H-1015-2P		CC608	CCZB1H102K	C CERA	50V B 1000PF K (AXIAL)	
ZZ140	PTCACAJ829	CABINET AS	DTQ-29M2FS		CCS07	CCZB1H102K	C CERA	50V B 1000PF K (AXIAL)	
40	2TF01612CL	TAPE FILAMENT	12MMX55ME CLEAR		RC636	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J	
AD001	4859000240	ADAPTER	2P15A 300V(D=4.0)		RCS33	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J	
M191A	7178301011	SCREW TAPPTITE	TT2 WAS 3X10 MFZN		ZZ210	PTUNSWJ811	PCB UNION AS	DTQ-29M2	
M201A	4856015800	SCREW CRT FIX	L=27		A001	4859806060	PCB UNION	246X35(246X246/6) S1B	
M201B	4856215402	WASHER RUBBER	CR T2.0		DF01	DKLR114L--	LED	KLR114L	
M201C	4856013610	SCREW SPKR FIX	L=16 A=17		IF01	1SR9HP----	IC PREAMP	SR-9HP	
M201D	4856816300	CLAMP WIRE	NYLON 6 (V0)		IF02	1PNA4603H-	IC PHOTO SENSOR	PNA4603H	
M211A	7172401612	SCREW TAPPTITE	TT2 TRS 4X16 MFZN BK		M191	4851942400	BUTTON CTRL	4946801+5540901	
M211B	7172401612	SCREW TAPPTITE	TT2 TRS 4X16 MFZN BK		P103A	4850703S19	CONNECTOR	YH025-03+YST025+ULW=300	
M211C	7172401612	SCREW TAPPTITE	TT2 TRS 4X16 MFZN BK		P701A	4850705S02	CONNECTOR	YH025-05+YST025+ULW=200	
M352	4853535600	HOLDER CORD	NYROLN 66		ZZ200	PTUNJB811	PCB UNION M-10 AS	DTQ-29M2	
M481	4854857401	BUTTON POWER A	ABS GY		ZZ200	PTUNJRJ811	PCB UNION RADIAL AS	DTQ-29M2	
M481A	4856715600	SPRING	SWPA PIE 0.4		SW702	5S50101Z90	SW TACT	THVV502GDA	
M541	4855419800	SPEC PLATE	ART 150		SW703	5S50101Z90	SW TACT	THVV502GDA	
M561	48556174SD	MARK BRAND	SILVER DIA-CUTTING		SW704	5S50101Z90	SW TACT	THVV502GDA	
M591	4855934202	DECO PLATE	ABS GY		SW705	5S50101Z90	SW TACT	THVV502GDA	
M591A	7172401612	SCREW TAPPTITE	TT2 TRS 4X16 MFZN BK		SW706	5S50101Z90	SW TACT	THVV502GDA	
M592	4855934601	DECO EYE	ABS BLUE		ZZ200	PTUNAJ811	PCB UNION AXIAL AS	DTQ-29M2	
M592A	7178301212	SCREW TAPPTITE	TT2 WAS 3X12 MFZN BK		C701	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z	
M593	4855934100	DECO AV	PVC CL T0.2		CC716	CCZF1H103Z	C CERA	50V F 0.01MF Z	
M681	4856812001	TIE CABLE	NYLON66 DA100		CF01	CCZF1H103Z	C CERA	50V F 0.01MF Z	
M781	4857818702	CLOTH BLACK	FELT T0.7 L=350 W=15		D721	DMTZJ5R6B-	DIODE ZENER	MTZJ 5.6B	
M782	4857821102	CLOTH BLACK	FELT 340X10X1.5		R701	RD-AZ240J-	R CARBON FILM	1/6 24 OHM J	
M901	2224050027	BOND SILICON	TSK-5370		RC742	RD-AZ222J-	R CARBON FILM	1/6 2.2K OHM J	
SP01A	7172401212	SCREW TAPPTITE	TT2 TRS 4X12 MFZNCK		RC746	RD-AZ152J-	R CARBON FILM	1/6 1.5K OHM J	
SP02A	7172401212	SCREW TAPPTITE	TT2 TRS 4X12 MFZNCK		RC747	RD-AZ392J-	R CARBON FILM	1/6 3.9K OHM J	
V901	4859629160	CRT	A68KTB259X001 P38	 	RC750	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
ZZ200	PTFMSJJ829	MASK FRONT AS	DTQ-29M2FS		RC751	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	

## ELECTRICAL PARTS LIST

LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK	LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK
RF01	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		I702	1AT24C16PC	IC	AT24C16-10PC	(R)
ZZ290	PTMPMSJ829	PCB MAIN MANUAL AS	DTQ-29M2FS		I703	1KA7805--	IC REGULATOR	KA7805	
10	2TM18006BE	TAPE MASKING	6.2X500		I801	PTA2SW7920	HEAT SINK ASSY	1STRF6656- + 7174301011	(R)
20	2TM10006LB	TAPE MASKING	3M #232-MAP-C 6.2X2000M		1	1STRF6656-	IC POWER	STR-F6656	△(R)
30	2291050615	FLUX SOLDER	DF-2012U		0000A	4857027920	HEAT SINK	AL EX BK	
40	2291050301	FLUX SOLVENT	IM-1000		0000B	7174301011	SCREW TAPPTITE	TT2 RND 3X10 MFZN	
50	2291140501	WAX COVER			I802	1SE130N--	IC	SE130N	△(R)
90	2291051001	FLUX KILLER	KFT-7		I803	1KP1010C--	IC PHOTO COUPLER	KP-1010C	△(R)
C307	CEYF1E332V	C ELECTRO	25V RSS 3300MF (16X31.5)		I805	TX0202DA--	THYRISTOR	X0202DA1BA2	△(R)
C408	CMYH3C912J	C MYLAR	1.6KV BUP 9100PF J	△	IS601	1MSP3440B6	IC AUDIO	MSP3440G-B6	(R)
C409	CMYH3C822J	C MYLAR	1.6KV BUP 8200PF J	△	IS603	1KA7805--	IC REGULATOR	KA7805	
C410	CMYE2G273J	C MYLAR	400V PU 0.027MF J	△	JA01	4859110050	JACK PIN BOARD	PH-JB-9614D	
C423	CMYE2G514J	C MYLAR	400V PU 0.51MF J		JAS03	4859110050	JACK PIN BOARD	PH-JB-9614D	
C430	CEYD1H689W	C ELECTRO	50V RHD 6.8MF (16X35.5)		L105	58N0000042	COIL VCO	TRF-V008	
C634	CEYF1V222V	C ELECTRO	35V RSS 2200MF (16X31.5)		L111	58C5580019	COIL CHOKE	TRF-9225 (0.55UH)	
C803	CL1JB3104M	C LINE ACROSS	AC250V 0.1MF M ECQ-UV WRL	△	L403	58H0000047	COIL H-LINEARITY	TRL-190D	
C804	CEYN2G331P	C ELECTRO	400V LHS 330MF (30X45)	△(R)	L404	58C7070085	COIL CHOKE	TLN-3062A	
C809	CH1BFE472M	C CERA AC	AC400V 4700PF M U/C/V	△	L801	5PTLF3024-	FILTER LINE	TLF-3024	
C813	CEYN2D221T	C ELECTRO	200V FWS 220MF (22X30)	△	M371A	4853747800	RETA PCB	NYLON 66	
C821	CEYF1E332V	C ELECTRO	25V RSS 3300MF (16X31.5)		M683	4856812001	TIE CABLE	NYLON66 DA100	
C824	CBYB3D102K	C CERA SEMI	2KV BL(N) 1000PF K	△	P102A	4850704S04	CONNECTOR	YH025-04+YST025+ULW=400	
C831	CEYF1V332V	C ELECTRO	35V RSS 3300MF (18X35.5)		P401A	4850705S04	CONNECTOR	YH025-05+YST025+ULW=400	
C908	4SG0D00103	SPARK GAP	S-23 900V-1.5KV		P901	4859238620	CONN WAFER	YPW500-02	
C909	4SG0D00103	SPARK GAP	S-23 900V-1.5KV		PWC1	4859900910	CORD POWER AS	KKP-419C+YPT-018=2100	
C910	4SG0D00103	SPARK GAP	S-23 900V-1.5KV		P802A	4859901111	CORD POWER	KKP-419C KLCE-2F (2.1ME)	
D402	DDG3-----	DIODE	DG3	(R)	P802B	4857417700	TERM CLAMP	PT-01-T3	
D403	DRGP30J--	DIODE	RGP30J		Q402	PTA2SW7603	HEAT SINK ASSY	T2SD2578- + 7174301011	(R)
D801	PTC1SW8902	HEAT SINK ASSY	DPBS606GU- + 7174300811	△	1	T2SD2578--	TR	2SD2578	(R)
D801	DPBS606GU-	DIODE BRIDGE	PBS606G	(R)	0000A	4857027603	HEAT SINK	AL EX	
D801A	4857018902	HEAT SINK	A1050P-H24		0000B	7174301011	SCREW TAPPTITE	TT2 RND 3X10 MFZN	
D801B	7174300811	SCREW TAPPTITE	TT2 RND 3X8 MFZN		Q403	TKTC3208--	TR	KTC3208	(R)
D810	DBYT56K---	DIODE	BYT56K		Q801	TKTA968AY-	TR	KTA968AY	(R)
D811	DBYT56K---	DIODE	BYT56K		Q901	PTL2SW6900	HEAT SINK ASSY	TKTC3229- + 7174301011	(R)
D815	DRGP30J--	DIODE	RGP30J		1	TKTC3229--	TR	KTC 3229	(R)
F801	5FKGB6323L	FUSE GLASS TUBE	KS MF51 6.3A 125/250V TL	△	0000A	4857026900	HEAT SINK	AL EX	
I101	1LA76834--	IC MAIN	LA76834	(R)	0000B	7174301011	SCREW TAPPTITE	TT2 RND 3X10 MFZN	
I301	PTC2SW8202	HEAT SINK ASSY	1LA7848-- + 7174300811		Q902	PTL2SW6900	HEAT SINK ASSY	TKTC3229- + 7174301011	(R)
1	1LA7848--	IC VERTICAL	LA7848	(R)	1	TKTC3229--	TR	KTC 3229	(R)
0000A	4857028202	HEAT SINK	AL EX BK		0000A	4857026900	HEAT SINK	AL EX	
0000B	7174300811	SCREW TAPPTITE	TT2 RND 3X8 MFZN		0000B	7174301011	SCREW TAPPTITE	TT2 RND 3X10 MFZN	
I401	1KA7805--	IC REGULATOR	KA7805		Q903	PTL2SW6900	HEAT SINK ASSY	TKTC3229- + 7174301011	(R)
I502	1TDA9183P-	IC COMBFILTER	TDA9183P	(R)	1	TKTC3229--	TR	KTC 3229	(R)
I503	1MM1118--	IC A/V SWITCH	MM1118	(R)	0000A	4857026900	HEAT SINK	AL EX	
I602	PTH2SW8210	HEAT SINK ASSY	1TDA8946J- + 7174301011	(R)	0000B	7174301011	SCREW TAPPTITE	TT2 RND 3X10 MFZN	
1	1TDA8946J-	IC AUDIO	TDA8946J	(R)	R801	DPC7R0M290	POSISTOR	2322 662 96709	(R)
0000A	4857028210	HEAT SINK	AL EX		R802	RX10T109KS	R CEMENT	10W 1 OHM K TRIPOD SMALL	(R)
0000B	7174301011	SCREW TAPPTITE	TT2 RND 3X10 MFZN		R825	RM02Y108K-	R METAL FLAT	2W 0.1 OHM K	(R)
0000C	4856815900	CLAMP WIRE	EGI T0.4+PVC COATING		SCT01	4859303830	SOCKET CRT	ISHG94S	(R)
I701	1DW8632KM1	IC MICOM	DW863240V-KM1(5V37)	(R)	SF101	5PTSF5241P	FILTER SAW	TSF5241P	

## ELECTRICAL PARTS LIST

LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK	LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK
SW701	5S50101035	SW TACT	KPT-1112 1C-1P		CCS11	HCBK102KCA	C CHIP CERA	50V X7R 1000PF K 2012	
T401	5TD0000018	TRANS DRIVE	THD-120	(R)	CCS12	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	
T402	50H0000189	FBT	FFA94048L	(R)	CCS13	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	
T402A	7178301212	SCREW TAPPTITE	TT2 WAS 3X12 MFZN BK		CCS16	HCQK471JCA	C CHIP CERA	50V CH 470PF J 2012	
T801	50M5345B1-	TRANS SMPS	TSM-5345B1	(R)	CCS17	HCQK471JCA	C CHIP CERA	50V CH 470PF J 2012	
TU01	4859719130	TUNER VARACTOR	DT5-NF20F	(R)	CCS18	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	
X702	5XYR03276C	CRYSTAL QUARTZ	C-001R 32.768000KHZ 20PPM	(R)	CCS21	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012	
XS601	5XE18R432E	CRYSTAL QUARTZ	HC-49/U 18.43200MHZ 30PPM	(R)	CCS22	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012	
Y801	5SC0101325	SW RELAY	HR-CR7 DC12V	(R)	CCS24	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012	
Z501	5PYXT4R5MB	FILTER CERA	XT 4.5MB		CCS25	HCQK471JCA	C CHIP CERA	50V CH 470PF J 2012	
ZZ200	PTMPJ2J829	PCB CHIP MOUNT B AS	DTQ-29M2FS		CCS26	HCBK102KCA	C CHIP CERA	50V X7R 1000PF K 2012	
CC102	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012		CCS27	HCBK102KCA	C CHIP CERA	50V X7R 1000PF K 2012	
CC111	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012		CCS28	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	
CC112	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012		CCS29	HCBK102KCA	C CHIP CERA	50V X7R 1000PF K 2012	
CC113	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012		CCS90	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012	
CC151	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012		CCS91	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012	
CC154	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012		RC103	HRFT153JCA	R CHIP	1/10 15K OHM J 2012	
CC180	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012		RC104	HRFT104JCA	R CHIP	1/10 100K OHM J 2012	
CC206	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012		RC105	HRFT153JCA	R CHIP	1/10 15K OHM J 2012	
CC209	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012		RC154	HRFT473JCA	R CHIP	1/10 47K OHM J 2012	
CC401	HCQK181JCA	C CHIP CERA	50V CH 180PF J 2012		RC156	HRFT473JCA	R CHIP	1/10 47K OHM J 2012	
CC450	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012		RC165	HRFT472JCA	R CHIP	1/10 4.7K OHM J 2012	
CC501	HCQK160JCA	C CHIP CERA	50V CH 16PF J 2012		RC208	HRFT331JCA	R CHIP	1/10 330 OHM J 2012	
CC502	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012		RC219	HRFT123JCA	R CHIP	1/10 12K OHM J 2012	
CC506	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012		RC225	HRFT331JCA	R CHIP	1/10 330 OHM J 2012	
CC507	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012		RC228	HRFT331JCA	R CHIP	1/10 330 OHM J 2012	
CC528	HCBK102KCA	C CHIP CERA	50V X7R 1000PF K 2012		RC229	HRFT331JCA	R CHIP	1/10 330 OHM J 2012	
CC574	HCQK300JCA	C CHIP CERA	50V CH 30PF J 2012		RC230	HRFT331JCA	R CHIP	1/10 330 OHM J 2012	
CC577	HCQK300JCA	C CHIP CERA	50V CH 30PF J 2012		RC302	HRFT473JCA	R CHIP	1/10 47K OHM J 2012	
CC578	HCQK300JCA	C CHIP CERA	50V CH 30PF J 2012		RC303	HRFT562JCA	R CHIP	1/10 5.6K OHM J 2012	
CC579	HCQK300JCA	C CHIP CERA	50V CH 30PF J 2012		RC306	HRFT623JCA	R CHIP	1/10 62K OHM J 2012	
CC701	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012		RC501	HRFT102JCA	R CHIP	1/10 1K OHM J 2012	
CC708	HCQK120JCA	C CHIP CERA	50V CH 12PF J 2012		RC503	HRFT152JCA	R CHIP	1/10 1.5K OHM J 2012	
CC720	HCBK102KCA	C CHIP CERA	50V X7R 1000PF K 2012		RC512	HRFT241JCA	R CHIP	1/10 240 OHM J 2012	
CC722	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012		RC525	HRFT122JCA	R CHIP	1/10 1.2K OHM J 2012	
CC723	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012		RC526	HRFT102JCA	R CHIP	1/10 1K OHM J 2012	
CC741	HCQK221JCA	C CHIP CERA	50V CH 220PF J 2012		RC557	HRFT302JCA	R CHIP	1/10 3K OHM J 2012	
CC752	HCQK180JCA	C CHIP CERA	50V CH 18PF J 2012		RC559	HRFT331JCA	R CHIP	1/10 330 OHM J 2012	
CC754	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012		RC562	HRFT914JCA	R CHIP	1/10 910KOHM J 2012	
CC757	HCBK333KCA	C CHIP CERA	50V X7R 0.033MF K 2012		RC567	HRFT103JCA	R CHIP	1/10 10K OHM J 2012	
CC777	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012		RC570	HRFT103JCA	R CHIP	1/10 10K OHM J 2012	
CC821	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012		RC601	HRFT243JCA	R CHIP	1/10 24K OHM J 2012	
CCS01	HCQK479CCA	C CHIP CERA	50V CH 4.7PF C 2012		RC602	HRFT224JCA	R CHIP	1/10 220K OHM J 2012	
CCS02	HCQK479CCA	C CHIP CERA	50V CH 4.7PF C 2012		RC603	HRFT392JCA	R CHIP	1/10 3.9K OHM J 2012	
CCS03	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012		RC632	HRFT153JCA	R CHIP	1/10 15K OHM J 2012	
CCS04	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012		RC634	HRFT202JCA	R CHIP	1/10 2K OHM J 2012	
CCS05	HCQK471JCA	C CHIP CERA	50V CH 470PF J 2012		RC635	HRFT102JCA	R CHIP	1/10 1K OHM J 2012	
CCS06	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012		RC704	HRFT102JCA	R CHIP	1/10 1K OHM J 2012	
CCS10	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012		RC705	HRFT102JCA	R CHIP	1/10 1K OHM J 2012	

## ELECTRICAL PARTS LIST

LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK	LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK
RC706	HRFT473JCA	R CHIP	1/10 47K OHM J 2012		RCS41	HRFT102JCA	R CHIP	1/10 1K OHM J 2012	
RC707	HRFT102JCA	R CHIP	1/10 1K OHM J 2012		RCS78	HRFT472JCA	R CHIP	1/10 4.7K OHM J 2012	
RC711	HRFT121JCA	R CHIP	1/10 120 OHM J 2012		RCT01	HRFT100JCA	R CHIP	1/10 10 OHM J 2012	
RC728	HRFT102JCA	R CHIP	1/10 1K OHM J 2012		RCT02	HRFT622JCA	R CHIP	1/10 6.2K OHM J 2012	
RC730	HRFT101JCA	R CHIP	1/10 100 OHM J 2012		RCT04	HRFT623JCA	R CHIP	1/10 62K OHM J 2012	
RC732	HRFT102JCA	R CHIP	1/10 1K OHM J 2012		ZZ200	PTMPJ0J829	PCB MAIN (RHU) AS	DTQ-29M2FS	
RC733	HRFT102JCA	R CHIP	1/10 1K OHM J 2012		C113	CEXF1C471V	C ELECTRO	16V RSS 470MF (10X12.5)TP	
RC734	HRFT102JCA	R CHIP	1/10 1K OHM J 2012		C212	CEXF1C471V	C ELECTRO	16V RSS 470MF (10X12.5)TP	
RC735	HRFT202JCA	R CHIP	1/10 2K OHM J 2012		C311	CEXF1C471V	C ELECTRO	16V RSS 470MF (10X12.5)TP	
RC736	HRFT102JCA	R CHIP	1/10 1K OHM J 2012		C403	CEXF2C101V	C ELECTRO	160V RSS 100MF (16X25) TP	△
RC737	HRFT392JCA	R CHIP	1/10 3.9K OHM J 2012		C404	CEXF2E100V	C ELECTRO	250V RSS 10MF (10X20) TP	△
RC738	HRFT362JCA	R CHIP	1/10 3.6K OHM J 2012		C417	CEXF1V471V	C ELECTRO	35V RSS 470MF (10X20) TP	
RC739	HRFT272JCA	R CHIP	1/10 2.7K OHM J 2012		C419	CEXF1V102V	C ELECTRO	35V RSS 1000MF (13X25) TP	
RC748	HRFT471JCA	R CHIP	1/10 470 OHM J 2012		C424	CEXA2D229E	C ELECTRO	200V RUL 2.2MF (10X16) TP	△
RC749	HRFT103JCA	R CHIP	1/10 10K OHM J 2012		C425	CEXF2A470V	C ELECTRO	100V RSS 47MF (10X16) TP	△
RC756	HRFT472JCA	R CHIP	1/10 4.7K OHM J 2012		C433	CEXF1C471C	C ELECTRO	16V RUS 470MF (10X12.5)TP	
RC757	HRFT514JCA	R CHIP	1/10 510K OHM J 2012		C437	CEXF1E471C	C ELECTRO	25V RUS 470MF (10X16) TP	
RC767	HRFT472JCA	R CHIP	1/10 4.7K OHM J 2012		C805	CH1BEE472M	C CERA AC	U/C/V 2.5KV 4700PF TP	△
RC780	HRFT102JCA	R CHIP	1/10 1K OHM J 2012		C806	CH1BEE472M	C CERA AC	U/C/V 2.5KV 4700PF TP	△
RC782	HRFT102JCA	R CHIP	1/10 1K OHM J 2012		C810	CBXB3D471K	C CERA SEMI	2KV BL(N) 470PF K (T)	△
RC790	HRFT472JCA	R CHIP	1/10 4.7K OHM J 2012		C815	CCXB3D471K	C CERA	2KV B 470PF K (TAPPING)	△
RC797	HRFT331JCA	R CHIP	1/10 330 OHM J 2012		C816	CEXF2C470V	C ELECTRO	160V RSS 47MF (13X25) TP	△
RC798	HRFT473JCA	R CHIP	1/10 47K OHM J 2012		C819	CCXB3D102K	C CERA	2KV B 1000PF K (TAPPING)	△
RC799	HRFT103JCA	R CHIP	1/10 10K OHM J 2012		C820	CEXF1E102V	C ELECTRO	25V RSS 1000MF (13X20) TP	
RC901	HRFT471JCA	R CHIP	1/10 470 OHM J 2012		C906	CH1BEE472M	C CERA AC	U/C/V 2.5KV 4700PF TP	△
RC902	HRFT471JCA	R CHIP	1/10 470 OHM J 2012		ZZ200	PTMPJ0J829	PCB MAIN M-10 AS	DTQ-29M2FS	
RC903	HRFT471JCA	R CHIP	1/10 470 OHM J 2012		10	2TM18006BE	TAPE MASKING	6.2X500	
RC907	HRFT471JCA	R CHIP	1/10 470 OHM J 2012		E001	4856310600	EYE LET	BSR T0.2 (R2.3)	
RC908	HRFT121JCA	R CHIP	1/10 120 OHM J 2012		E003	4856310600	EYE LET	BSR T0.2 (R2.3)	
RC909	HRFT121JCA	R CHIP	1/10 120 OHM J 2012		E004	4856310300	EYE LET	BSR T0.2 (R1.6)	
RC915	HRFT221JCA	R CHIP	1/10 220 OHM J 2012		E005	4856310300	EYE LET	BSR T0.2 (R1.6)	
RC921	HRFT471JCA	R CHIP	1/10 470 OHM J 2012		E007	4856310600	EYE LET	BSR T0.2 (R2.3)	
RC922	HRFT471JCA	R CHIP	1/10 470 OHM J 2012		E008	4856310600	EYE LET	BSR T0.2 (R2.3)	
RC923	HRFT471JCA	R CHIP	1/10 470 OHM J 2012		E009	4856310300	EYE LET	BSR T0.2 (R1.6)	
RCS06	HRFT102JCA	R CHIP	1/10 1K OHM J 2012		E010	4856310600	EYE LET	BSR T0.2 (R2.3)	
RCS07	HRFT102JCA	R CHIP	1/10 1K OHM J 2012		E011	4856310600	EYE LET	BSR T0.2 (R2.3)	
RCS08	HRFT182JCA	R CHIP	1/10 1.8K OHM J 2012		E012	4856310600	EYE LET	BSR T0.2 (R2.3)	
RCS09	HRFT203JCA	R CHIP	1/10 20K OHM J 2012		E013	4856310600	EYE LET	BSR T0.2 (R2.3)	
RCS11	HRFT103JCA	R CHIP	1/10 10K OHM J 2012		E014	4856310300	EYE LET	BSR T0.2 (R1.6)	
RCS12	HRFT203JCA	R CHIP	1/10 20K OHM J 2012		E015	4856310300	EYE LET	BSR T0.2 (R1.6)	
RCS14	HRFT473JCA	R CHIP	1/10 47K OHM J 2012		E016	4856310300	EYE LET	BSR T0.2 (R1.6)	
RCS16	HRFT750JCA	R CHIP	1/10 75 OHM J 2012		E017	4856310300	EYE LET	BSR T0.2 (R1.6)	
RCS30	HRFT473JCA	R CHIP	1/10 47K OHM J 2012		E018	4856310300	EYE LET	BSR T0.2 (R1.6)	
RCS31	HRFT101JCA	R CHIP	1/10 100 OHM J 2012		E019	4856310300	EYE LET	BSR T0.2 (R1.6)	
RCS32	HRFT473JCA	R CHIP	1/10 47K OHM J 2012		E020	4856310300	EYE LET	BSR T0.2 (R1.6)	
RCS34	HRFT102JCA	R CHIP	1/10 1K OHM J 2012		E021	4856310300	EYE LET	BSR T0.2 (R1.6)	
RCS37	HRFT102JCA	R CHIP	1/10 1K OHM J 2012		E022	4856310300	EYE LET	BSR T0.2 (R1.6)	
RCS39	HRFT473JCA	R CHIP	1/10 47K OHM J 2012		E023	4856310300	EYE LET	BSR T0.2 (R1.6)	
RCS40	HRFT473JCA	R CHIP	1/10 47K OHM J 2012		E024	4856310300	EYE LET	BSR T0.2 (R1.6)	

## ELECTRICAL PARTS LIST

LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK	LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK
E025	4856310300	EYE LET	BSR T0.2 (R1.6)		E151	4856310600	EYE LET	BSR T0.2 (R2.3)	
E026	4856310300	EYE LET	BSR T0.2 (R1.6)		E152	4856310600	EYE LET	BSR T0.2 (R2.3)	
E027	4856310300	EYE LET	BSR T0.2 (R1.6)		E155	4856310600	EYE LET	BSR T0.2 (R2.3)	
E030	4856310600	EYE LET	BSR T0.2 (R2.3)		E156	4856310600	EYE LET	BSR T0.2 (R2.3)	
E031	4856310600	EYE LET	BSR T0.2 (R2.3)		E157	4856310300	EYE LET	BSR T0.2 (R1.6)	
E039	4856310600	EYE LET	BSR T0.2 (R2.3)		E158	4856310300	EYE LET	BSR T0.2 (R1.6)	
E040	4856310600	EYE LET	BSR T0.2 (R2.3)		E159	4856310300	EYE LET	BSR T0.2 (R1.6)	
E042	4856310600	EYE LET	BSR T0.2 (R2.3)		E160	4856310600	EYE LET	BSR T0.2 (R2.3)	
E043	4856310600	EYE LET	BSR T0.2 (R2.3)		E161	4856310600	EYE LET	BSR T0.2 (R2.3)	
E044	4856310600	EYE LET	BSR T0.2 (R2.3)		E162	4856310600	EYE LET	BSR T0.2 (R2.3)	
E045	4856310600	EYE LET	BSR T0.2 (R2.3)		N001	4857417500	TERM PIN	DA-IB0214(D2.3/DY PIN)	△
E046	4856310600	EYE LET	BSR T0.2 (R2.3)		N002	4857417500	TERM PIN	DA-IB0214(D2.3/DY PIN)	△
E047	4856310600	EYE LET	BSR T0.2 (R2.3)		N003	4857417500	TERM PIN	DA-IB0214(D2.3/DY PIN)	△
E048	4856310600	EYE LET	BSR T0.2 (R2.3)		N004	4857417500	TERM PIN	DA-IB0214(D2.3/DY PIN)	△
E049	4856310600	EYE LET	BSR T0.2 (R2.3)		N007	4857417500	TERM PIN	DA-IB0214(D2.3/DY PIN)	△
E050	4856310600	EYE LET	BSR T0.2 (R2.3)		N008	4857417500	TERM PIN	DA-IB0214(D2.3/DY PIN)	△
E051	4856310600	EYE LET	BSR T0.2 (R2.3)		P102	485923172S	CONN WAFER	YW025-04 (STICK)	
E052	4856310600	EYE LET	BSR T0.2 (R2.3)		P103	485923162S	CONN WAFER	YW025-03 (STICK)	
E053	4856310600	EYE LET	BSR T0.2 (R2.3)		P201	485923182S	CONN WAFER	YW025-05 (STICK)	
E059	4856310300	EYE LET	BSR T0.2 (R1.6)		P401	485923182S	CONN WAFER	YW025-05 (STICK)	
E060	4856310300	EYE LET	BSR T0.2 (R1.6)		P601	485923172S	CONN WAFER	YW025-04 (STICK)	
E064	4856310300	EYE LET	BSR T0.2 (R1.6)		P701	485923182S	CONN WAFER	YW025-05 (STICK)	
E074	4856310600	EYE LET	BSR T0.2 (R2.3)		R104	RS02Z472JS	R M-OXIDE FILM	2W 4.7K OHM J SMALL	
E075	4856310600	EYE LET	BSR T0.2 (R2.3)		R401	RS02Z680JS	R M-OXIDE FILM	2W 68 OHM J SMALL	
E079	4856310300	EYE LET	BSR T0.2 (R1.6)		R402	RS02Z680JS	R M-OXIDE FILM	2W 68 OHM J SMALL	
E081	4856310300	EYE LET	BSR T0.2 (R1.6)		R411	RS02Z100J-	R M-OXIDE FILM	2W 10 OHM J (TAPPING)	
E082	4856310300	EYE LET	BSR T0.2 (R1.6)		R417	RF01Z229J-	R FUSIBLE	1W 2.2 OHM J (TAPPING)	
E083	4856310300	EYE LET	BSR T0.2 (R1.6)		R418	RF01Z229J-	R FUSIBLE	1W 2.2 OHM J (TAPPING)	
E108	4856310300	EYE LET	BSR T0.2 (R1.6)		R419	RF02Z159J-	R FUSIBLE	2W 1.5 OHM J (TAPPING)	
E109	4856310300	EYE LET	BSR T0.2 (R1.6)		R425	RS02Z163JS	R M-OXIDE FILM	2W 16K OHM J SMALL	
E112	4856310300	EYE LET	BSR T0.2 (R1.6)		R810	RF01Z398K-	R FUSIBLE	1W 0.39 OHM K (TAPPING)	
E113	4856310300	EYE LET	BSR T0.2 (R1.6)		R831	RS02Z103JS	R M-OXIDE FILM	2W 10K OHM J SMALL	
E115	4856310600	EYE LET	BSR T0.2 (R2.3)		R837	RF02Z228K-	R FUSIBLE	2W 0.22 OHM K (TAPPING)	
E116	4856310600	EYE LET	BSR T0.2 (R2.3)		R915	RF01Z229J-	R FUSIBLE	1W 2.2 OHM J (TAPPING)	
E125	4856310300	EYE LET	BSR T0.2 (R1.6)		R916	RF01Z229J-	R FUSIBLE	1W 2.2 OHM J (TAPPING)	
E126	4856310300	EYE LET	BSR T0.2 (R1.6)		ZZ200	PTMPJRK829	PCB MAIN RADIAL AS	DTQ-29M2FS	
E133	4856310300	EYE LET	BSR T0.2 (R1.6)		C106	CEXF1C101V	C ELECTRO	16V RSS 100MF (6.3X11) TP	
E139	4856310300	EYE LET	BSR T0.2 (R1.6)		C107	CEXF1H228V	C ELECTRO	50V RSS 0.22MF (5X11) TP	
E140	4856310300	EYE LET	BSR T0.2 (R1.6)		C108	CEXF1H101V	C ELECTRO	50V RSS 100MF (8X11.5) TP	
E141	4856310300	EYE LET	BSR T0.2 (R1.6)		C109	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP	
E142	4856310300	EYE LET	BSR T0.2 (R1.6)		C114	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP	
E143	4856310300	EYE LET	BSR T0.2 (R1.6)		C116	CMXM2A333J	C MYLAR	100V 0.03MF J (TP)	
E144	4856310300	EYE LET	BSR T0.2 (R1.6)		C117	CMXM2A103J	C MYLAR	100V 0.01MF J (TP)	
E145	4856310300	EYE LET	BSR T0.2 (R1.6)		C201	CEXF1H108V	C ELECTRO	50V RSS 0.1MF (5X11) TP	
E146	4856310300	EYE LET	BSR T0.2 (R1.6)		C202	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP	
E147	4856310300	EYE LET	BSR T0.2 (R1.6)		C204	CEXF1H478V	C ELECTRO	50V RSS 0.47MF (5X11) TP	
E148	4856310300	EYE LET	BSR T0.2 (R1.6)		C205	CEXF1C101V	C ELECTRO	16V RSS 100MF (6.3X11) TP	
E149	4856310300	EYE LET	BSR T0.2 (R1.6)		C210	CEXF1E470V	C ELECTRO	25V RSS 47MF (5X11) TP	
E150	4856310300	EYE LET	BSR T0.2 (R1.6)		C213	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP	

## ELECTRICAL PARTS LIST

LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK	LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK
C214	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP		C704	CEXF1H229V	C ELECTRO	50V RSS 2.2MF (5X11) TP	
C215	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP		C705	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP	
C301	CXSL2H100D	C CERA	500V SL 10PF D (TAPPING)		C709	CEXF1C221V	C ELECTRO	16V RSS 220MF (8X11.5) TP	
C303	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP		C807	CCXB1H821K	C CERA	50V B 820PF K (TAPPING)	
C304	CMXM2A224J	C MYLAR	100V 0.22MF J		C808	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP	
C305	CEXF1H101V	C ELECTRO	50V RSS 100MF (8X11.5) TP		C814	CXSL2H470J	C CERA	500V SL 47PF J (TAPPING)	⚠
C306	CEXD1H109Q	C ELECTRO	50V RT 1MF (6.3X11) TP		C818	CMXL1J224J	C MYLAR	63V MEU 0.22MF J (TP)	
C308	CMXM2A153J	C MYLAR	100V 0.015MF J (TP)		C822	CEXF1C101A	C ELECTRO	16V RSM 100MF (6.3X7) TP	
C309	CMXM2A473J	C MYLAR	100V 0.047MF J (TP)		C825	CEXF1H229V	C ELECTRO	50V RSS 2.2MF (5X11) TP	
C310	CMXM2A103J	C MYLAR	100V 0.01MF J (TP)		C829	CEXF1H470V	C ELECTRO	50V RSS 47MF (6.3X11) TP	
C312	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP		C830	CCXB1H152K	C CERA	50V B 1500PF K (TAPPING)	
C313	CEXD1H109Q	C ELECTRO	50V RT 1MF (6.3X11) TP		C832	CEXF1H220V	C ELECTRO	50V RSS 22MF (5X11) TP	
C314	CXCH1H200J	C CERA	50V CH 20PF J (TAPPING)		C833	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP	
C401	CCXB2H102K	C CERA	500V B 1000PF K (TAPPING)		C834	CMXM2A683J	C MYLAR	100V 0.068MF J (TP)	
C402	CMXM2A104J	C MYLAR	100V 0.1MF J (TP)		C862	CEXF1E101V	C ELECTRO	25V RSS 100MF (6.3X11) TP	
C405	CEXF2C109V	C ELECTRO	160V RSS 1MF (6.3X11) TP		CS216	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP	
C416	CCXB2H102K	C CERA	500V B 1000PF K (TAPPING)		CS217	CEXF1E221V	C ELECTRO	25V RSS 220MF (8X11.5) TP	
C418	CCXB2H102K	C CERA	500V B 1000PF K (TAPPING)		CS602	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP	
C420	CCXB2H102K	C CERA	500V B 1000PF K (TAPPING)		CS605	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP	
C421	CEXF1H470V	C ELECTRO	50V RSS 47MF (6.3X11) TP		CS608	CEXF1H229V	C ELECTRO	50V RSS 2.2MF (5X11) TP	
C422	CCXB2H102K	C CERA	500V B 1000PF K (TAPPING)		CS609	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP	
C429	CMXM2A104J	C MYLAR	100V 0.1MF J (TP)		CS611	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP	
C501	CMXL1H105J	C MYLAR	50V MEU 1MF J		CS612	CEXF1H339V	C ELECTRO	50V RSS 3.3MF (5X11) TP	
C502	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP		CS613	CMXL1J224J	C MYLAR	63V MEU 0.22MF J (TP)	
C503	CEXF1C221V	C ELECTRO	16V RSS 220MF (8X11.5) TP		CS614	CMXM2A104J	C MYLAR	100V 0.1MF J (TP)	
C504	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP		CS615	CEXF1E470V	C ELECTRO	25V RSS 47MF (5X11) TP	
C505	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP		CS616	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP	
C506	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP		CS617	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP	
C507	CMXM2A224J	C MYLAR	100V 0.22MF J		CS619	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP	
C508	CMXM2A224J	C MYLAR	100V 0.22MF J		CS621	CMXM2A152J	C MYLAR	100V 1500PF J (TP)	
C509	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP		CS623	CMXM2A104J	C MYLAR	100V 0.1MF J (TP)	
C510	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP		CS624	CMXM2A104J	C MYLAR	100V 0.1MF J (TP)	
C511	CMXM2A153J	C MYLAR	100V 0.015MF J (TP)		CS626	CMXL1J104J	C MYLAR	63V MEU 0.1MF J	
C512	CEXF1H108V	C ELECTRO	50V RSS 0.1MF (5X11) TP		CS631	CEXF1E470V	C ELECTRO	25V RSS 47MF (5X11) TP	
C513	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP		CS632	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP	
C517	CXMX2A103J	C MYLAR	100V 0.01MF J (TP)		CT570	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP	
C518	CEXF1H478V	C ELECTRO	50V RSS 0.47MF (5X11) TP		F801A	4857415001	CLIP FUSE	PFC5000-0702	
C601	CCXF1H103Z	C CERA	50V F 0.01MF Z (TAPPING)		F801B	4857415001	CLIP FUSE	PFC5000-0702	
C602	CCXF1H103Z	C CERA	50V F 0.01MF Z (TAPPING)		L604	58C0000096	COIL CHOKE	610G0233(470K)	
C603	CMXL1J224J	C MYLAR	63V MEU 0.22MF J (TP)		L607	58C0000096	COIL CHOKE	610G0233(470K)	
C604	CEXF1H470V	C ELECTRO	50V RSS 47MF (6.3X11) TP		L805	58CX430599	COIL CHOKE	AZ-9004Y 940K TP	
C606	CMXM2A104J	C MYLAR	100V 0.1MF J (TP)		L806	58C0000096	COIL CHOKE	610G0233(470K)	
C607	CMXL1J224J	C MYLAR	63V MEU 0.22MF J (TP)		L809	58CX430599	COIL CHOKE	AZ-9004Y 940K TP	
C610	CMXL1J224J	C MYLAR	63V MEU 0.22MF J (TP)		L901	5CPX181J--	COIL PEAKING	180UH J (RADIAL)	®
C622	CMXM2A152J	C MYLAR	100V 1500PF J (TP)		Q203	TKTA1266Y-	TR	KTA1266Y (TP)	
C625	CMXL1J104J	C MYLAR	63V MEU 0.1MF J		Q407	TKTC3207--	TR	KTC3207 (TP)	®
C669	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP		Q601	TKTC3198Y-	TR	KTC3198Y	
C702	CEXF1E101V	C ELECTRO	25V RSS 100MF (6.3X11) TP		Q602	TKTC3198Y-	TR	KTC3198Y	
C703	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP		Q603	TKTA1266Y-	TR	KTA1266Y (TP)	

## ELECTRICAL PARTS LIST

LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK	LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK
Q703	TKTC3203Y-	TR	KTC3203-Y		CS618	CZSL1H470J	C CERA	50V SL 47PF J (AXIAL)	
Q704	TKTA1266Y-	TR	KTA1266Y (TP)		CS620	CZSL1H200J	C CERA	50V SL 20PF J (AXIAL)	
Q705	TKTC3198Y-	TR	KTC3198Y		D101	DUZ5R6BM--	DIODE ZENER	UZ-5.6BM	
Q706	TKTC3198Y-	TR	KTC3198Y		D102	DUZ33B----	DIODE ZENER	UZ-33B	(R)
Q802	TKTC3198Y-	TR	KTC3198Y		D208	DUZ9R1BM--	DIODE ZENER	UZ-9.1BM	
Q803	TKTC3198Y-	TR	KTC3198Y		D301	D1N4004S--	DIODE	1N4004S	
Q806	TKTC3198Y-	TR	KTC3198Y		D401	DUZ9R1BM--	DIODE ZENER	UZ-9.1BM	
Q904	TKTC3198Y-	TR	KTC3198Y		D404	D1N4148--	DIODE	1N4148 (TAPPING)	
Q905	TKTC3198Y-	TR	KTC3198Y		D406	DRGP15J--	DIODE	RGP15J	
Q906	TKTC3198Y-	TR	KTC3198Y		D407	D1N4937G--	DIODE	1N4937G (TAPPING)	
Q907	TKTA1266Y-	TR	KTA1266Y (TP)		D408	DRH1B-----	DIODE	RH-1B (TAPPING)	(R)
QS205	TKTC3198Y-	TR	KTC3198Y		D410	D1N4937G--	DIODE	1N4937G (TAPPING)	
R102	RN02B910JS	R METAL FILM	2W 91 OHM J SMALL		D411	D1N4937G--	DIODE	1N4937G (TAPPING)	
R204	RN02B471JS	R METAL FILM	2W 470 OHM J SMALL		D415	DUZ9R1BM--	DIODE ZENER	UZ-9.1BM	
R304	RN01B109JS	R METAL FILM	1W 1 OHM J SMALL		D502	D1N4148--	DIODE	1N4148 (TAPPING)	
R305	RN01B109JS	R METAL FILM	1W 1 OHM J SMALL		D504	D1N4148--	DIODE	1N4148 (TAPPING)	
R308	RN02B471JS	R METAL FILM	2W 470 OHM J SMALL		D602	D1N4148--	DIODE	1N4148 (TAPPING)	
R309	RN02B271JS	R METAL FILM	2W 270 OHM J SMALL		D603	D1N4148--	DIODE	1N4148 (TAPPING)	
R315	RN02B620JS	R METAL FILM	2W 62 OHM J SMALL		D607	D1N4148--	DIODE	1N4148 (TAPPING)	
R410	RN02B103JS	R METAL FILM	2W 10K OHM J SMALL		D702	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R415	RN02B102JS	R METAL FILM	2W 1K OHM J SMALL		D705	D1N4148--	DIODE	1N4148 (TAPPING)	
R420	RN02B333JS	R METAL FILM	2W 33K OHM J SMALL		D706	DUZ3R9B--	DIODE ZENER	UZ-3.9B	
R430	RN02B100JS	R METAL FILM	2W 10 OHM J SMALL		D710	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R450	RN02B101JS	R METAL FILM	2W 100 OHM J SMALL		D711	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R451	RN02B271JS	R METAL FILM	2W 270 OHM J SMALL		D712	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R511	RN01B151JS	R METAL FILM	1W 150 OHM J SMALL		D713	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R803	RN01B102JS	R METAL FILM	1W 1K OHM J SMALL		D719	D1N4148--	DIODE	1N4148 (TAPPING)	
R814	RN02B102JS	R METAL FILM	2W 1K OHM J SMALL		D720	DMTZJ5R6B-	DIODE ZENER	MTZJ 5.6B	
R818	RN02B472JS	R METAL FILM	2W 4.7K OHM J SMALL		D723	DMTZJ5R6B-	DIODE ZENER	MTZJ 5.6B	
R823	RN02B103JS	R METAL FILM	2W 10K OHM J SMALL		D803	D1N4937G--	DIODE	1N4937G (TAPPING)	(R)
R826	RN02B240JS	R METAL FILM	2W 24 OHM J SMALL		D804	D1N4937G--	DIODE	1N4937G (TAPPING)	(R)
R828	RN02B100JS	R METAL FILM	2W 10 OHM J SMALL		D805	D1N4937G--	DIODE	1N4937G (TAPPING)	(R)
R921	RN02B203JS	R METAL FILM	2W 20K OHM J SMALL		D807	D1N4937G--	DIODE	1N4937G (TAPPING)	(R)
R922	RN02B203JS	R METAL FILM	2W 20K OHM J SMALL		D812	D1N4937G--	DIODE	1N4937G (TAPPING)	(R)
R923	RN02B203JS	R METAL FILM	2W 20K OHM J SMALL		D814	D1N4937G--	DIODE	1N4937G (TAPPING)	(R)
R924	RN02B203JS	R METAL FILM	2W 20K OHM J SMALL		D819	D1N4937G--	DIODE	1N4937G (TAPPING)	(R)
R925	RN02B203JS	R METAL FILM	2W 20K OHM J SMALL		DS213	DUZ9R1BM--	DIODE ZENER	UZ-9.1BM	
R926	RN02B203JS	R METAL FILM	2W 20K OHM J SMALL		DS601	DMTZJ5R6B-	DIODE ZENER	MTZJ 5.6B	
RS601	RN02B910JS	R METAL FILM	2W 91 OHM J SMALL		DS604	D1N4148--	DIODE	1N4148 (TAPPING)	
RS602	RN01B121JS	R METAL FILM	1W 120 OHM J SMALL		DS605	DUZ8R2BM--	DIODE ZENER	UZ-8.2B	
X501	5XEX3R579C	CRYSTAL QUARTZ	HC-49U 3.579545M (TP)		DS609	D1N4148--	DIODE	1N4148 (TAPPING)	
ZZ200	PTMPJAJ829	PCB MAIN AXIAL AS	DTQ-29M2FS		DS619	D1N4148--	DIODE	1N4148 (TAPPING)	
10	2TM14006LB	TAPE MASKING	3M #232 6.0X2000M		DS622	DMTZJ5R6B-	DIODE ZENER	MTZJ 5.6B	
20	2TM10006LB	TAPE MASKING	3M #232-MAP-C 6.2X2000M		DS623	DMTZJ5R6B-	DIODE ZENER	MTZJ 5.6B	
A001	4859812991	PCB MAIN	330X246 S1B		J001	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
C500	CBZR1C392M	C CERA	16V Y5R 3900PF M (AXIAL)		J002	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
C901	CCZB1H271K	C CERA	50V B 270PF K		J003	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
C902	CCZB1H271K	C CERA	50V B 270PF K		J004	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
C903	CCZB1H271K	C CERA	50V B 270PF K		J005	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	

## ELECTRICAL PARTS LIST

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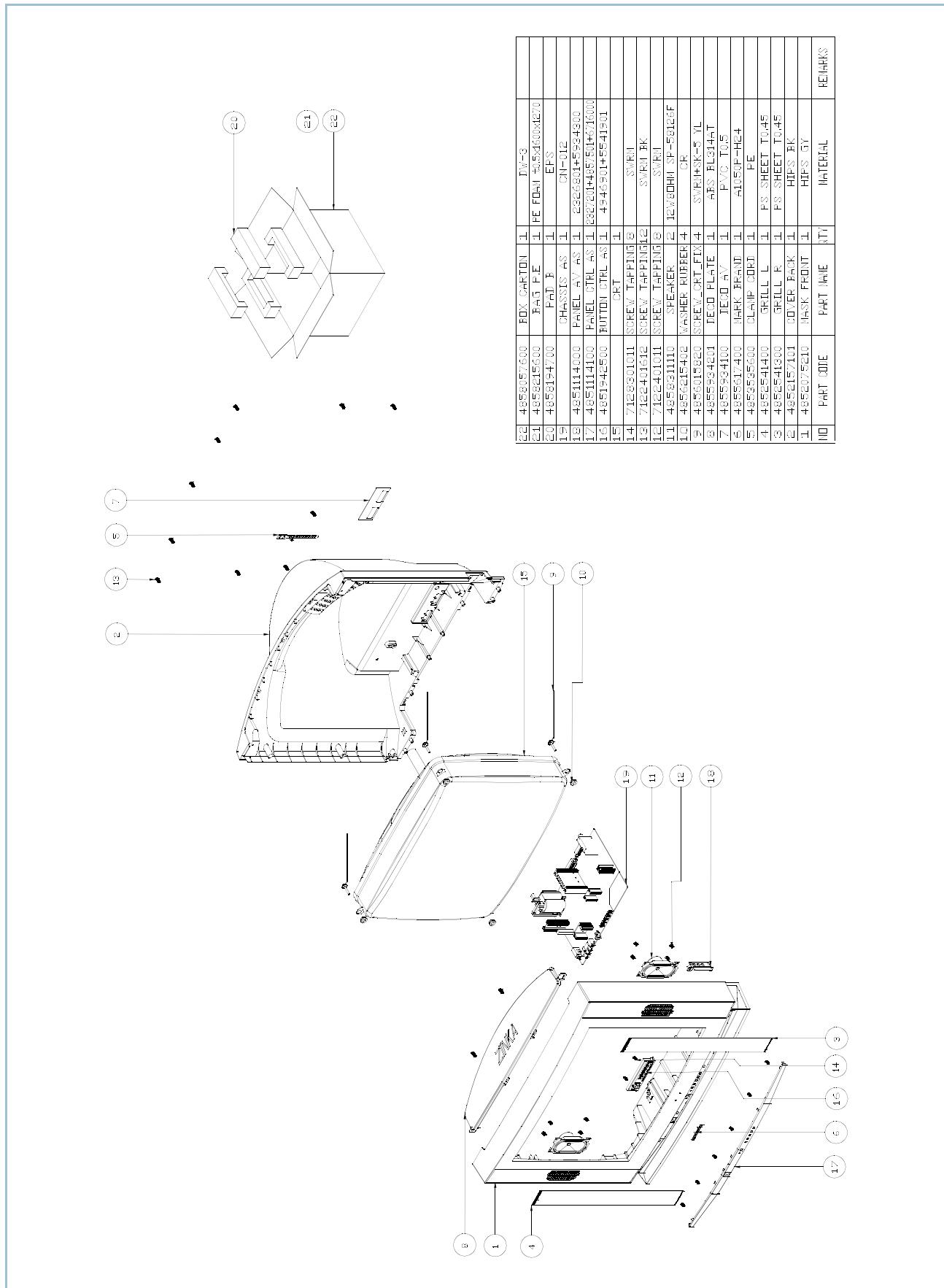
LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK	LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK
J123	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		JS038	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J124	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		JS052	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J125	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		JS095	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J126	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		JS107	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J127	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		JS121	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J128	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		JS156	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J130	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		JS175	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J131	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		JT167	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J132	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		JT180	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J133	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		JT181	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J134	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		L101	5CPZ330K02	COIL PEAKING	33UH K (AXIAL 3.5MM)	
J135	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		L203	5CPZ100K04	COIL PEAKING	10UH 10.5MM K (LAL04TB)	
J138	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		L401	58C0000026	COIL BEAD	HC-4035	
J139	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		L501	5CPZ100K02	COIL PEAKING	10UH K (AXIAL 3.5MM)	
J140	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		L502	5CPZ100K02	COIL PEAKING	10UH K (AXIAL 3.5MM)	
J145	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		L533	5CPZ150K02	COIL PEAKING	15UH K (AXIAL 3.5MM)	
J147	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		L701	5CPZ100K02	COIL PEAKING	10UH K (AXIAL 3.5MM)	
J150	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		L802	5MC0000100	COIL BEAD	HC-3550	
J151	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		L804	5MC0000100	COIL BEAD	HC-3550	
J152	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		L807	5MC0000100	COIL BEAD	HC-3550	
J155	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		L808	5MC0000100	COIL BEAD	HC-3550	
J157	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		LS601	5CPZ560K02	COIL PEAKING	56UH K (AXIAL 3.5MM)	
J158	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		LS602	5CPZ150K02	COIL PEAKING	15UH K (AXIAL 3.5MM)	
J160	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		LS603	5CPZ560K04	COIL PEAKING	56UH K (AXIAL 10.5MM)	
J163	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		R106	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
J164	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		R107	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
J166	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		R201	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
J168	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		R202	RD-AZ753J-	R CARBON FILM	1/6 75K OHM J	
J169	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		R205	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
J171	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		R214	RD-AZ750J-	R CARBON FILM	1/6 75 OHM J	
J172	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		R301	RD-AZ752J-	R CARBON FILM	1/6 7.5K OHM J	
J173	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		R302	RD-AZ113J-	R CARBON FILM	1/6 11K OHM J	
J174	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		R303	RN-AZ1002F	R METAL FILM	1/6 10K OHM F	
J176	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		R306	RD-AZ124J-	R CARBON FILM	1/4 120K OHM J	
J177	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		R307	RD-AZ153J-	R CARBON FILM	1/4 15K OHM J	
J178	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		R310	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	
J180	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		R311	RD-AZ363J-	R CARBON FILM	1/6 36K OHM J	
J181	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		R312	RD-AZ133J-	R CARBON FILM	1/6 13K OHM J	
J183	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		R313	RD-AZ913J-	R CARBON FILM	1/6 91K OHM J	
J185	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		R406	RD-AZ203J-	R CARBON FILM	1/4 20K OHM J	
J187	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		R408	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
J189	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		R413	RN-AZ2801F	R METAL FILM	1/4 8.2K OHM F	
J190	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		R423	RD-2Z470J-	R CARBON FILM	1/2 47 OHM J	
J700	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		R424	RD-AZ123J-	R CARBON FILM	1/4 12K OHM J	
JS024	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		R427	RD-AZ223J-	R CARBON FILM	1/6 22K OHM J	
JS027	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		R428	RD-AZ271J-	R CARBON FILM	1/4 270 OHM J	
JS029	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		R429	RD-AZ102J-	R CARBON FILM	1/4 1K OHM J	
JS031	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		R432	RD-AZ220J-	R CARBON FILM	1/4 22 OHM J	
JS032	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		R443	RD-AZ152J-	R CARBON FILM	1/6 1.5K OHM J	

## ELECTRICAL PARTS LIST

LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK	LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK
R500	RD-AZ514J-	R CARBON FILM	1/6 510K OHM J		R808	RD-4Z681J-	R CARBON FILM	1/4 680 OHM J	
R501	RD-4Z271J-	R CARBON FILM	1/4 270 OHM J		R809	RD-4Z102J-	R CARBON FILM	1/4 1K OHM J	
R502	RD-2Z151J-	R CARBON FILM	1/2 150 OHM J		R811	RD-4Z623J-	R CARBON FILM	1/4 62K OHM J	
R503	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J		R812	RD-AZ223J-	R CARBON FILM	1/6 22K OHM J	
R504	RD-AZ562J-	R CARBON FILM	1/6 5.6K OHM J		R813	RD-AZ363J-	R CARBON FILM	1/6 36K OHM J	
R505	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J		R815	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R506	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J		R819	RD-AZ682J-	R CARBON FILM	1/6 6.8K OHM J	
R507	RD-AZ123J-	R CARBON FILM	1/6 12K OHM J		R821	RC-2Z105KP	R CARBON COMP	1/2 1M OHM K	
R508	RD-AZ154J-	R CARBON FILM	1/6 150K OHM J		R827	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J	
R510	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J		R829	RD-4Z622J-	R CARBON FILM	1/4 6.2K OHM J	
R554	RD-4Z102J-	R CARBON FILM	1/4 1K OHM J		R830	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J	
R568	RN-4Z4701F	R METAL FILM	1/4 4.70K OHM F		R832	RD-AZ203J-	R CARBON FILM	1/4 20K OHM J	
R602	RD-AZ223J-	R CARBON FILM	1/6 22K OHM J		R833	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	
R604	RD-AZ392J-	R CARBON FILM	1/6 3.9K OHM J		R834	RD-4Z109J-	R CARBON FILM	1/4 1 OHM J	
R609	RD-AZ681J-	R CARBON FILM	1/4 680 OHM J		R888	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R703	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J		R904	RD-AZ181J-	R CARBON FILM	1/6 180 OHM J	
R704	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J		R905	RD-AZ181J-	R CARBON FILM	1/6 180 OHM J	
R705	RD-AZ471J-	R CARBON FILM	1/6 470 OHM J		R906	RD-AZ181J-	R CARBON FILM	1/6 180 OHM J	
R706	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J		R913	RD-AZ561J-	R CARBON FILM	1/6 560 OHM J	
R707	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J		R914	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J	
R711	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J		R917	RD-4Z684J-	R CARBON FILM	1/4 680K OHM J	
R712	RD-AZ471J-	R CARBON FILM	1/6 470 OHM J		R918	RD-2Z202J-	R CARBON FILM	1/2 2K OHM J	
R713	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J		R919	RD-2Z202J-	R CARBON FILM	1/2 2K OHM J	
R714	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		R920	RD-2Z202J-	R CARBON FILM	1/2 2K OHM J	
R715	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J		RS208	RD-2Z151J-	R CARBON FILM	1/2 150 OHM J	
R717	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J		RS209	RD-AZ680J-	R CARBON FILM	1/6 68 OHM J	
R722	RD-AZ512J-	R CARBON FILM	1/6 5.1K OHM J		RS210	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
R739	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		RS605	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R755	RD-AZ512J-	R CARBON FILM	1/6 5.1K OHM J		RS607	RD-AZ182J-	R CARBON FILM	1/6 1.8K OHM J	
R769	RD-AZ471J-	R CARBON FILM	1/6 470 OHM J		RS704	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J	
R770	RD-4Z101J-	R CARBON FILM	1/4 100 OHM J		RS718	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R776	RD-AZ562J-	R CARBON FILM	1/6 5.6K OHM J		RS719	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R777	RD-AZ562J-	R CARBON FILM	1/6 5.6K OHM J		RS781	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R804	RD-2Z330J-	R CARBON FILM	1/2 33 OHM J		RS783	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R805	RD-2Z272J-	R CARBON FILM	1/2 2.7K OHM J		RS784	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J	
R806	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J		RT508	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R807	RC-2Z565KP	R CARBON COMP	1/2 5.6M OHM K						

# EXPLODED VIEW

## 1. 29M2FS



## PRINTED CIRCUIT BOARD

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**DAEWOO**  
DAEWOO ELECTRONICS CO., LTD

686, AHYEON-DONG MAPO-GU  
SEOUL, KOREA  
C.P.O. BOX 8003 SEOUL, KOREA  
TELEX : DWELEC K28177-8  
CABLE : "DAEWOOELEC"  
E-mail : djkoo@web.dwe.co.kr  
TEL : 82-2-360-7806  
FAX : 82-2-360-7877

U-COM(I701)

## DW863240V- KM1

SYS1 (H)	1	P10	P07	42	POWER ON(H)
NC	2	P11	P06	41	Degaussing SW
ST / MONO	3	P12	P05	40	AUDIO MUTE(H)
AV S/W1	4	P13/PWM1	P04	39	Timer LED
BLUE BACK	5	P14/PWM2	P03	38	MSP RESET
AV S/W2	6	P15/PWM3	P02	37	H.OUT ON(L)/OFF(H)
SYS2	7	P16	P01	36	POWER ON
3- SYS	8	P17/PWM	P00	35	ST- BY(H)
Vss	9	VSS	P73/INT3/TOIN	34	REMOCON IN
XT1	10	XT1	P72/INT2/TOIN	33	GND
XT2	11	XT2	P71/INT1	32	X- RAY
VDD	12	VDD	P70/INT0	31	NC
KEY IN	13	P84/AN4	P63/SCLK1	30	T- CLOCK
AFT IN	14	P85/AN5	P62/SDA1	29	T- DATA
AGC IN	15	P86/AN6	P61/SCLK0	28	M- CLOCK
Digital Sensor	16	P87/AN7	P60/SDA0	27	M- DATA
RESET	17	RES	I	26	H- T
FILTER	18	FILT	BL	25	BL
CVBS	19	CVIN	B	24	B
V Sync	20	VS	G	23	G
H Sync	21	HS	R	22	R

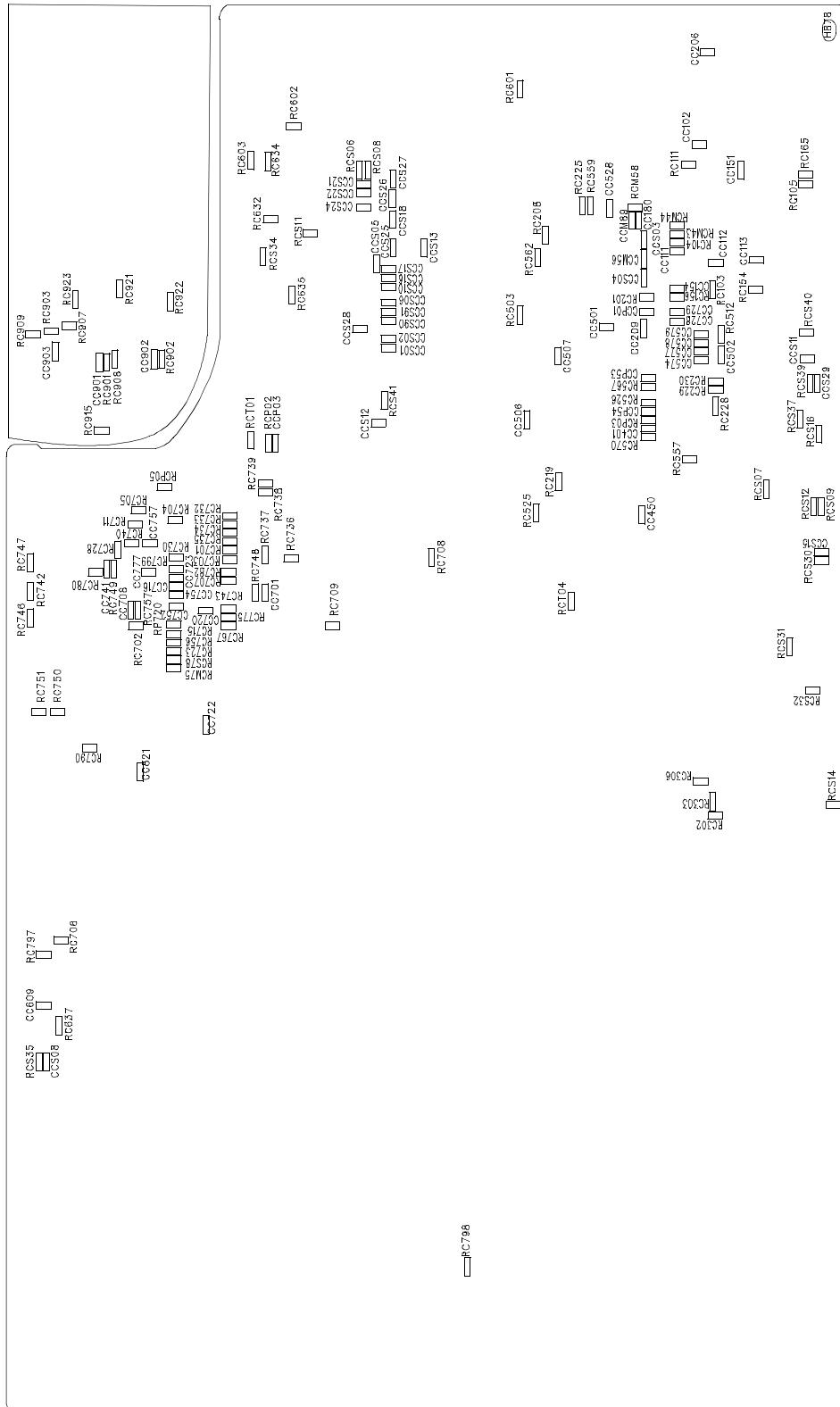
- X'TAL : 32.768 KHz

NO	PIN	PIN NAME	DESCRIPTION ( LEVEL )
1	1	SYS 1	NC
2	2	NC	NC
3	3	ST/MONO	+5V
4	4	AV S/W1	I503#6
5	5	BLUE BACK	+5V
6	6	AV S/W2	I503#8
7	7	SYS2	NC
8	8	3-SYS	GND
9	9	Vss	GND
10	10	XT1	32.768KHz
11	11	XT2	32.768KHz
12	12	Vdd	+5V
13	13	KEY IN	SW702~6
14	14	AFT IN	I101#10
15	15	AGC IN	TU01,I101#4
16	16	DIGITAL SENSOR	IF02
17	17	RESET	RESET ACTIVE "L"
18	18	FILTER	FILTER
19	19	CVBS	I501#12
20	20	VS	I101#30
21	21	HS	I101#31
22	22	R	I101#14
23	23	G	I101#15
24	24	B	I101#16
25	25	BL	I101#17
26	26	H-T	NC
27	27	MSP-DATA	IS601#8
28	28	MSP-CLOCK	IS601#7
29	29	T-DATA	TU01,I101#11
30	30	T-CLOCK	TU01,I101#12
31	31	NC	NC
32	32	X-RAY	GND
33	33	GND	GND
34	34	REMOCON IN	IF01
35	35	STAND-BY	NC
36	36	PWR ON	+5V
37	37	H-OUT	Q407 BASE ( TO 2SD2578)
38	38	MSP-RESET	IS601#20 ACTIVE "L"
39	39	TIMER LED	STD-BY: "H", TV ON: "L"
40	40	AUDIO MUTE	I602#10
41	41	Degaussing sw	Q703 BASE (TO RELAY) Degaussing : "H"
42	42	PWR ON	Q806 BASE(TO STR-F6656) TV ON : "H"

# CHIP COMPONENTS POSITION

## Appendix

## CN-012N CHASSIS



## PCB AV

NO	L/C	X	Y	ORIENT
1	CC608	40	20.25	0
2	CCS07	63.75	13.75	0

## PCB MAIN

NO	L/C	X	Y	ORIENT
1	CC102	297.25	43.75	270
2	CC111	272.25	50.25	270
3	CC112	269.5	39	270
4	CC113	270.25	27.25	270
5	CC151	291.25	31.75	0
6	CC154	263.5	50.25	270
7	CC180	279.5	61.5	180
8	CC206	319	41.5	270
9	CC209	254.25	60.25	180
10	CC401	230.75	58.75	270
11	CC450	210.5	60.75	180
12	CC501	254.5	71	270
13	CC502	248	37.5	180
14	CC506	232.75	94.25	180
15	CC507	247.75	85.25	0
16	CC528	282.25	70	180
17	CC574	246.75	43.25	270
18	CC577	248.75	43.25	90
19	CC578	250.75	43.25	90
20	CC579	252.75	43.25	90
21	CC609	95.5	235.25	270
22	CC701	192.25	170.5	180
23	CC708	188.25	209.75	0
24	CC716	193.75	196.5	270
25	CC720	188	188	90
26	CC722	161.25	187.75	0
27	CC723	195.75	196.5	270
28	CC728	255.75	50.25	270
29	CC729	258	50.25	270

N0	L/C	X	Y	ORIENT
30	CC741	197.75	216.75	0
31	CC752	189	196.5	270
32	CC754	191.75	196.5	270
33	CC757	203.75	204.25	90
34	CC777	197	204.5	90
35	CC821	150.25	207	180
36	CC901	246.25	219	180
37	CC902	247	203	180
38	CC903	248.75	231.75	180
39	CCP01	258	59.25	270
40	CCP03	227.25	167.5	0
41	CCP53	242.5	58.75	270
42	CCP54	234.75	58.75	270
43	CCS01	249.5	134.5	270
44	CCS02	251.75	134.5	270
45	CCS03	275	60	0
46	CCS04	266	60	180
47	CCS05	269.25	138	0
48	CCS06	260.25	134.5	270
49	CCS08	82.25	234.5	0
50	CCS10	263.9	134.5	270
51	CCS11	247	12.25	270
52	CCS12	232	137.5	90
53	CCS13	273	124.25	180
54	CCS15	201.75	8.25	90
55	CCS16	266	134.5	270
56	CCS17	268	134.5	270
57	CCS18	279.7	133.4	180
58	CCS21	288	141.75	270
59	CCS22	286	141.75	270
60	CCS24	282.5	141.75	270
61	CCS25	273.1	133.3	180
62	CCS26	284.6	133.5	0
63	CCS27	289.2	133.3	180
64	CCS28	254	143	270
65	CCS29	241.25	9.5	0

N0	L/C	X	Y	ORIENT
66	CCS90	256	134.5	270
67	CCS91	258	134.5	270
68	RC103	263.25	40	0
69	RC104	274.25	50.25	270
70	RC105	288	12.75	90
71	RC111	292.5	47	270
72	RC154	263.25	27.5	270
73	RC156	261.5	50.25	90
74	RC165	290.25	12.75	90
75	RC201	261.5	59.25	270
76	RC208	276	88.75	180
77	RC219	218.25	85	0
78	RC225	283	78	0
79	RC228	236	39.25	180
80	RC229	239.75	39	270
81	RC230	241.75	39	270
82	RC302	139.5	39.25	90
83	RC303	143.25	40	180
84	RC306	148	43.5	270
85	RC501	211.25	84	90
86	RC503	257.25	96.25	0
87	RC512	252.75	37.5	180
88	RC525	211	91.5	0
89	RC526	236.75	58.75	270
90	RC557	223.5	46.75	90
91	RC559	283	75.75	180
92	RC562	270.75	91	180
93	RC567	240.5	58.75	270
94	RC570	228.75	58.75	270
95	RC601	310.25	96.25	180
96	RC602	301.5	162.25	270
97	RC603	293.5	174.75	180
98	RC632	279.75	169	90
99	RC634	293.25	169.75	180
100	RC635	262	162.75	180
101	RC637	90.75	230.75	0

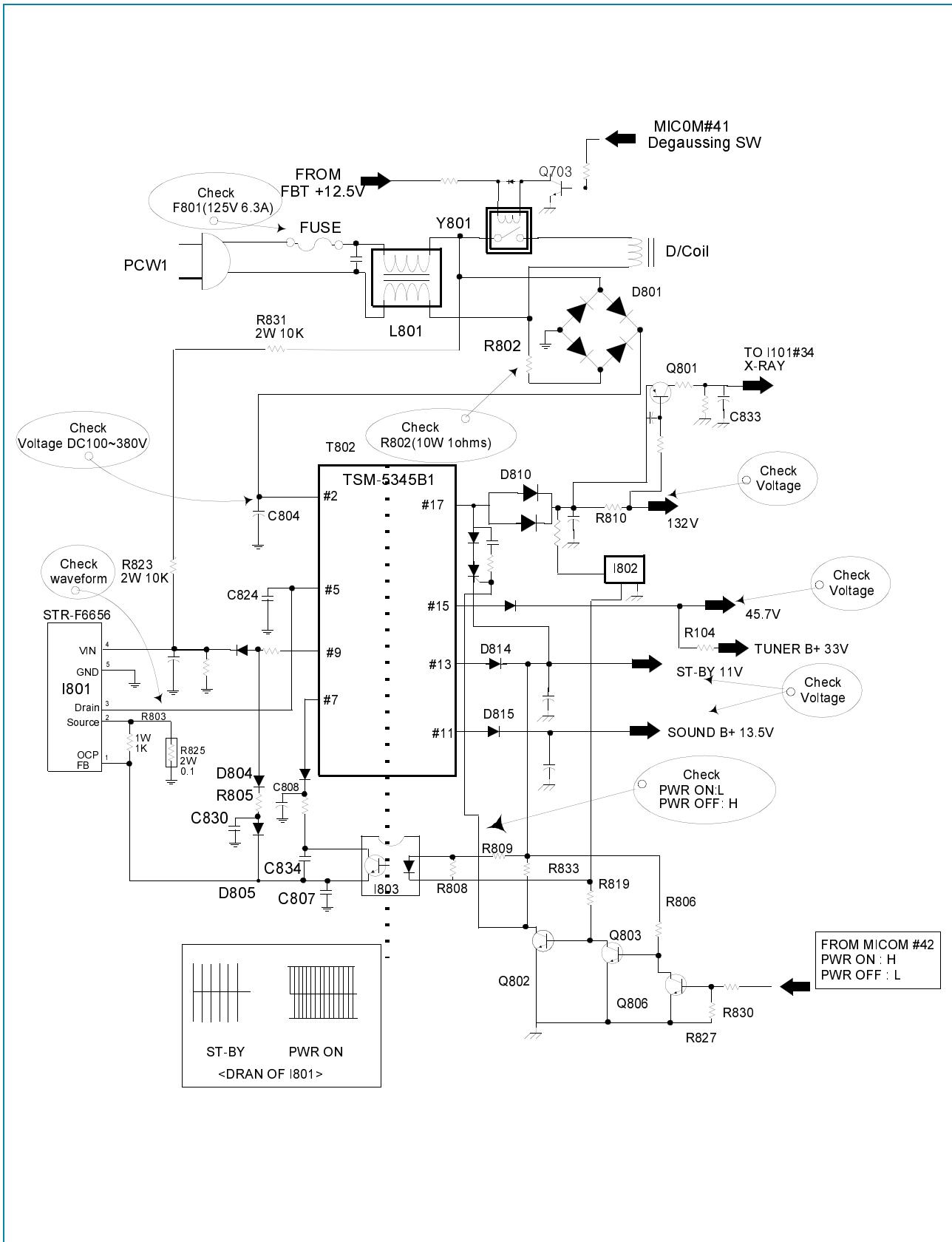
N0	L/C	X	Y	ORIENT
102	RC701	202.25	180.75	90
103	RC702	184.5	208.25	90
104	RC703	200	180.75	90
105	RC704	209.25	196.75	270
106	RC705	211.5	207.5	270
107	RC706	110.75	230	90
108	RC707	195	181.25	270
109	RC708	200.5	122	180
110	RC709	184.5	150.75	270
111	RC711	208.25	208.5	270
112	RC715	182.5	197.25	90
113	RC723	178.5	197.25	90
114	RC728	202.25	213.5	0
115	RC730	200.5	196.5	90
116	RC732	210.25	180.75	90
117	RC733	208.25	180.75	90
118	RC734	206.25	180.75	90
119	RC735	204.25	180.75	90
120	RC736	200.25	163	270
121	RC737	201.25	170.5	0
122	RC738	215.75	170.5	270
123	RC739	217.75	170.5	270
124	RC740	203.75	209.5	90
125	RC742	192.5	239	0
126	RC743	188.5	181.25	270
127	RC746	186.25	239	0
128	RC747	199.25	239	180
129	RC748	192.25	173.5	180
130	RC749	197.75	214.75	0
131	RC750	164.25	231.25	90
132	RC751	164.25	236.5	90
133	RC756	180.5	197.25	90
134	RC757	188.25	207.75	180
135	RC767	184.5	181.25	270
136	RC775	186.5	181.25	270
137	RC780	197	220	270

N0	L/C	X	Y	ORIENT
138	RC782	197	181.25	270
139	RC790	155.75	221.75	270
140	RC797	107.5	235.25	90
141	RC798	34.25	111.5	0
142	RC799	197.75	196.5	90
143	RC901	246.25	216.75	0
144	RC902	247	200.75	0
145	RC903	253.5	233	90
146	RC907	254.75	227.75	270
147	RC908	247	214.5	0
148	RC909	252.75	238.25	270
149	RC915	230.25	218.25	270
150	RC921	263.5	213	180
151	RC922	260.5	198.25	180
152	RC923	261	226	180
153	RCP02	227.25	169.5	0
154	RCP03	232.75	58.75	270
155	RCP05	217	200	90
156	RCS06	291.25	143	0
157	RCS07	216.5	24.25	0
158	RCS08	291.25	140.5	0
159	RCS09	212.5	8.25	0
160	RCS11	276.5	157.25	270
161	RCS12	212.5	10.5	180
162	RCS14	142.5	4.75	90
163	RCS16	229.5	9	180
164	RCS30	199.75	8.25	90
165	RCS31	179.5	17.5	180
166	RCS32	169.25	10.75	270
167	RCS34	271	171.25	180
168	RCS35	82.25	236.5	0
169	RCS37	233	14.5	180
170	RCS39	241.25	11.5	0
171	RCS40	253.25	12.5	270
172	RCS41	237.25	135.75	180
173	RCS78	176.5	197.25	90

# TROUBLESHOOTING GUIDE

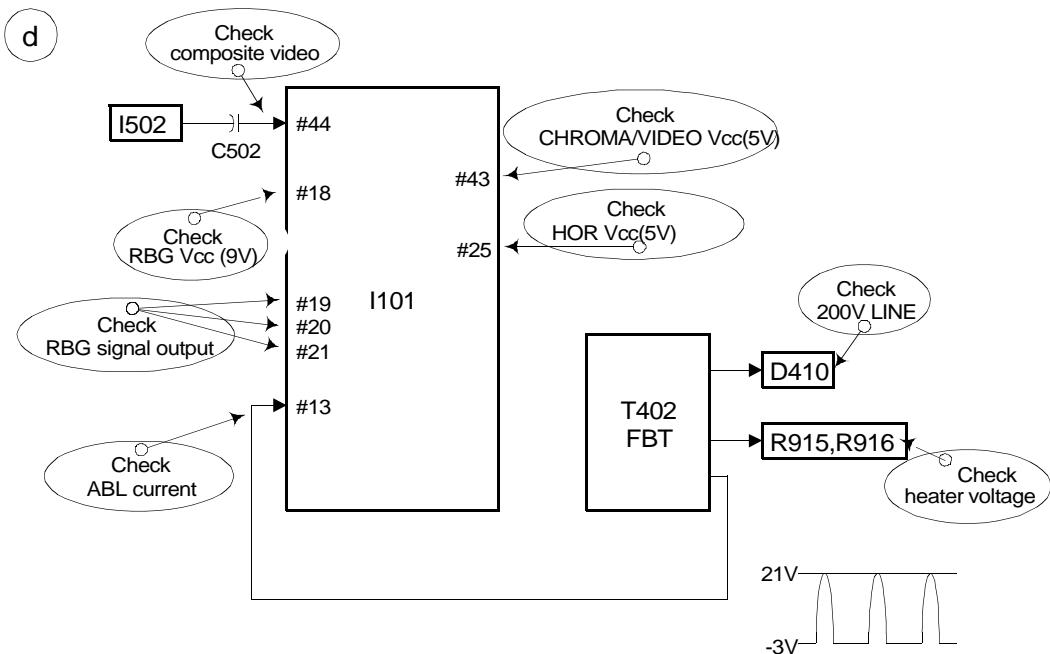
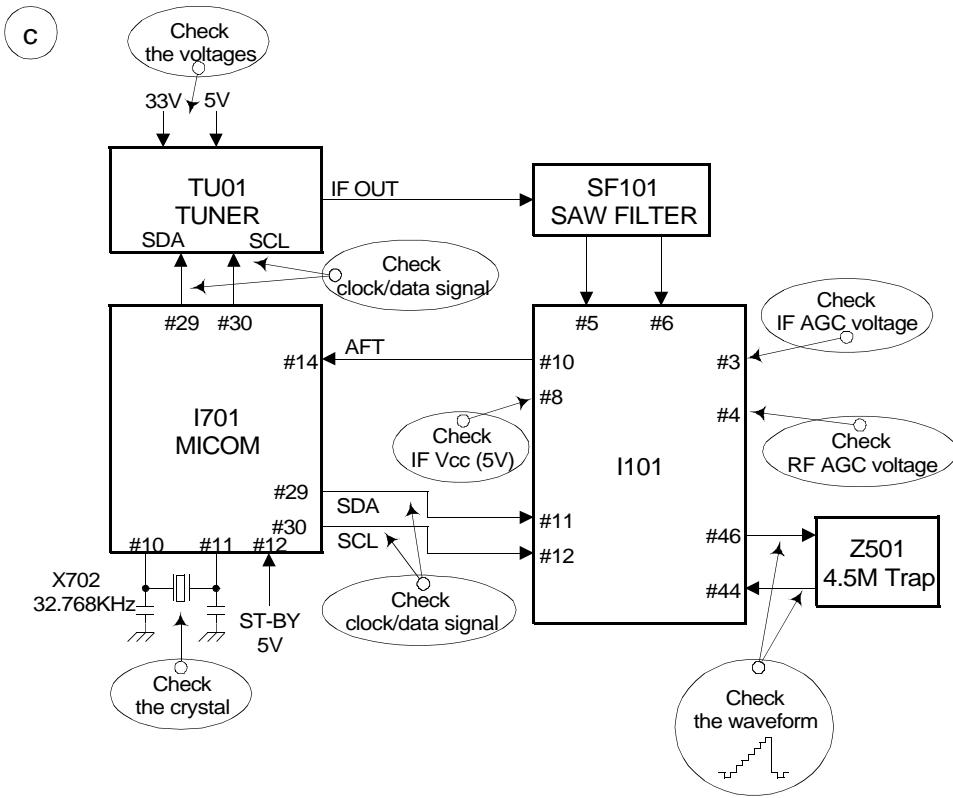
## Appendix

## 1. NO POWER



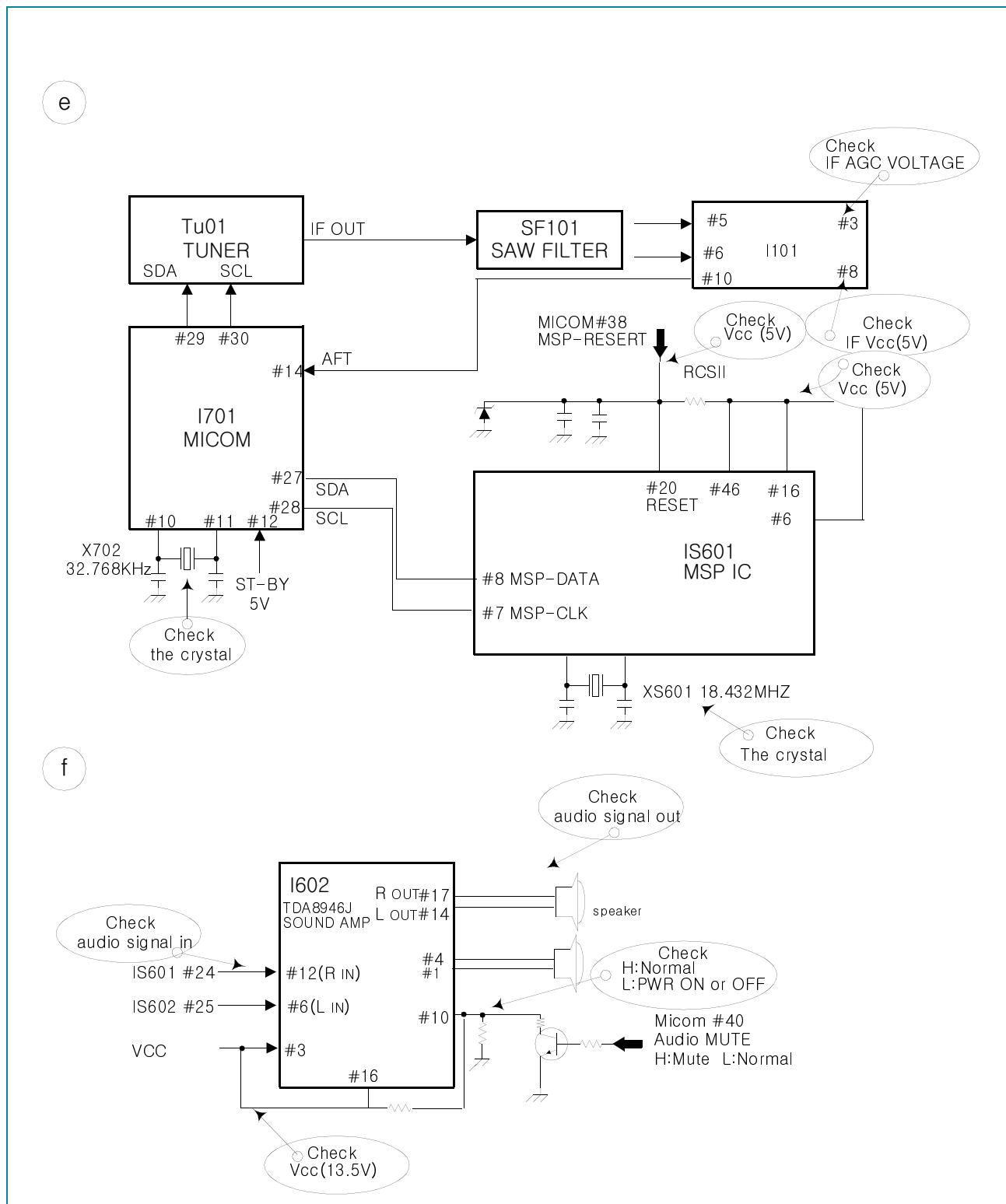
## 2. NO PICTURE

Check the waveform of I101 #46

NG : GO to the figure **C**OK : Go the figure **D**

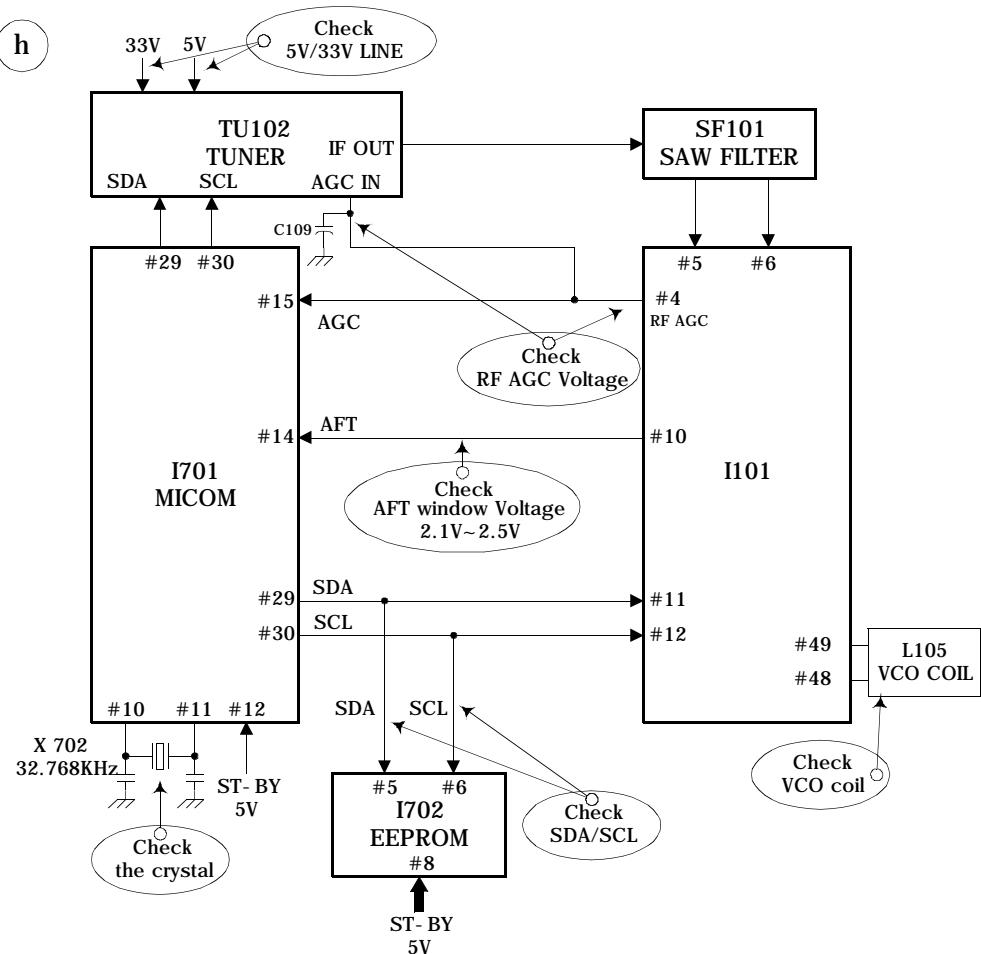
### 3. NO SOUND

Check audio output signal of I101 #1	NG : Go to the figure <a href="#">②</a> OK : Go to the figure <a href="#">③</a>
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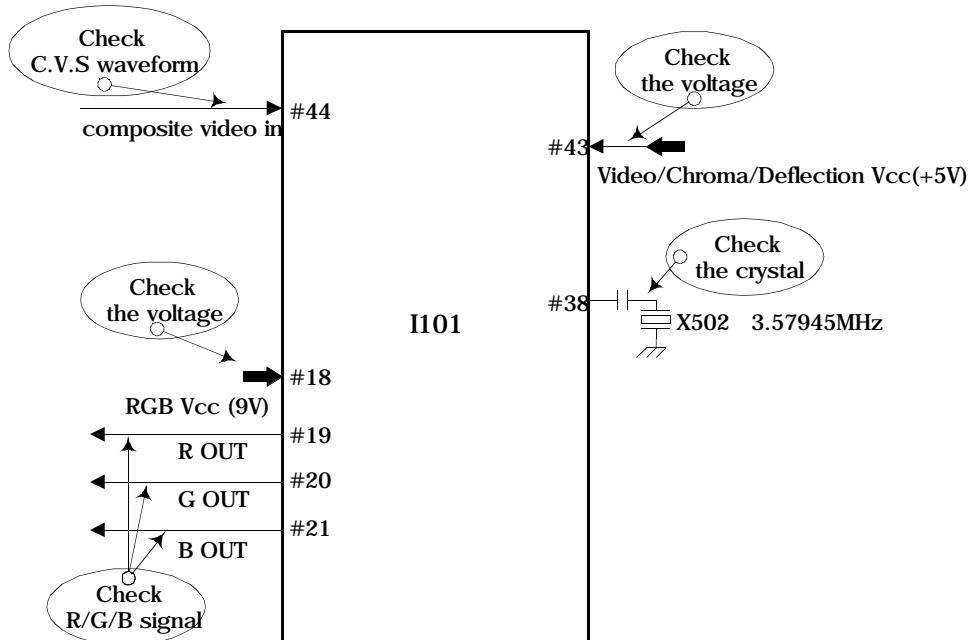


## 4. CH DON'T STOP

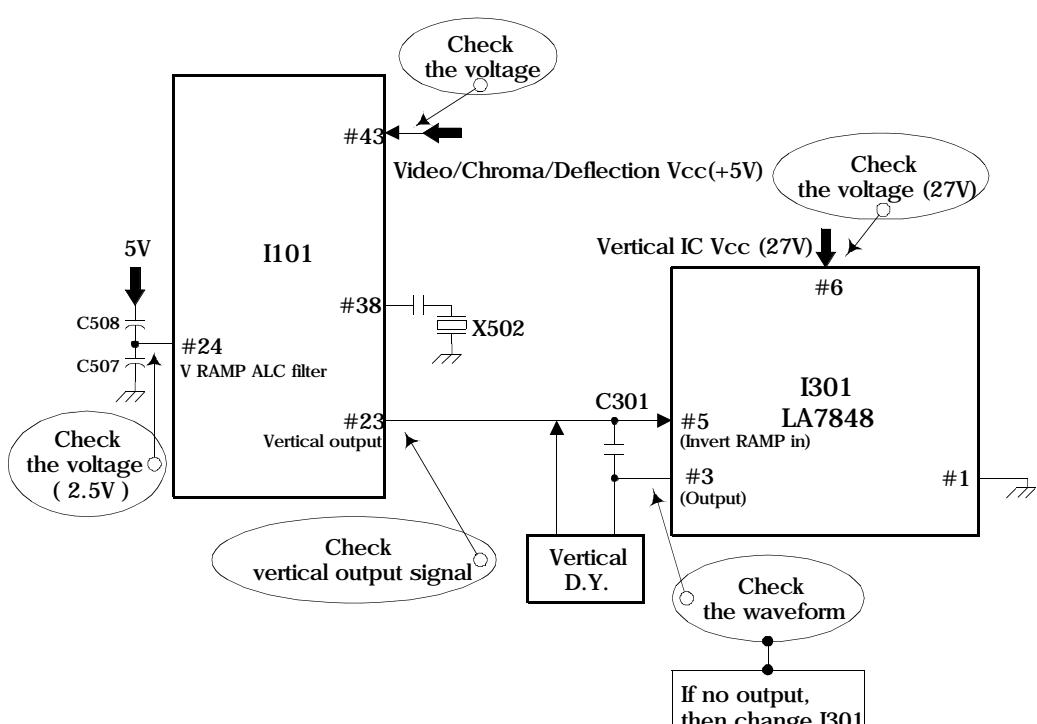
Check the input signal conditions	NG : Loss of signal or weak signal
	OK : Go to the figure ④



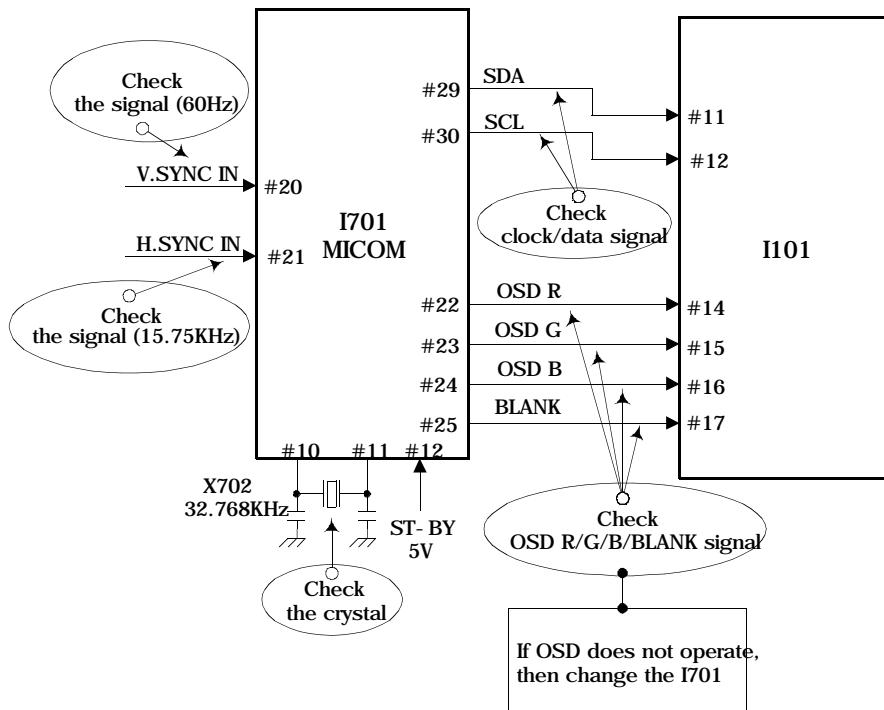
## 5. NO COLOR



## 6. NO VERTICAL DEFLECTION



## 7. NO OSD (ON SCREEN DISPLAY)



## 8. NO REMOCON RECEIPT

